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DEPARTMENT OF STATE
RECEIVED
MAY 29
1872
DESPATCH

No 138 - 137. One Enclosure

Legation of the United States
Peking March 10th 1872

Frederick F Low

to

Department of State

Subject

Imperial Decree issued at request of British Minister after the assault upon him in the streets of Peking.

Encloses translation of the Decree

137

No 138 One Enclosure

Legation of the United States
Peking March 10th 1872

Sir:-

I have the honor to send herewith translation of a Memorial of the Foreign Office addressed to the Emperor praying that a Decree be issued particularly enjoining upon the officials and the people to strictly observe the treaties wherein it is stipulated that the officials of foreign countries are to be treated with respect and

Hon Hamilton Fish
Secretary of State

and Consideration, and that no undue hindrances be placed in the way of foreign trade. This memorial appeared in the manuscript copy of the official gazette, with the Emperors approval annexed, which practically transforms it into an Imperial Edict. This action of the Government has been undoubtedly taken at the instance of the British Minister, who was assaulted in the streets of Peking by some youths not long since.

The circumstances attending the assault, as I gather them from Mr Wade, were

were substantially as follows:
The British Minister, dressed
in plain clothes was walking
in the streets some distance from
the Legations. When passing
a group of children and youths
some of the former cried out
"foreign devil", hearing which
Mr Wade stopped and began
to remonstrate with them upon
the use of such unbecoming
language, when he was struck
on the head by a stick in the
hands of one of the boys cutting
the scalp but not inflicting
a serious wound.

When the matter was
brought to the attention of the

Foreign

Foreign Office Mr Wade in-
-formed the Ministers that he
did not ask that the culprit
be punished more severely than
would be proper for assaulting
any foreigner, as the boy was
undoubtedly unaware of the
official character of the person
whom he attacked. What he
did place particular emphasis
upon was the fact that the
sentiments of the people which
led to the not infrequent use
of unbecoming language towards
foreign residents, and the absence
of any effort on the part of
the official and educated
classes to disabuse the minds

of

of the masses of their prejudices. He pointed out the duty of the Government and warned the Prince that unless some active and tangible steps were taken promptly to remedy the evil and show the good faith of the Government of H. I. Majesty, the Minister could not answer for the course the British Government might deem necessary to take to protect its subjects from insult and injury.

It may be doubted whether a decree in this form will prove of material advantage; and still it seems to be about the

the only thing which can be reasonably demanded of the Government which it is in a position to grant.

My faith is not robust that it will prove of any tangible benefit.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

Enclosure

No. 1 An Imperial Decree enjoining upon officials and people the duty of treating foreigners with respect, and prohibiting the infraction of treaties as regards trade

Enclosure No 1
Despatch " 138

Translation.

Your Majesty's servants Yihsin (Prince Kung) and his colleagues, upon their knees present a memorial for that, in order to the better understanding[1] of the treaties, they would request Your Majesty to be pleased[2] to command that they should be obeyed.

They would humbly observe that in the Treaty concluded in the tenth year of the reign Hsien Fêng, between the Ta Tsing Kuo, (the Empire or Government of China) and the Ta Ying Kuo (the Kingdom or Government of Great Britain) [3] there is an article providing that the Ministers

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(1) The explanation or interpretation of the treaties in order to a better observance of them. The same expression is used of the laws.

(2) They request a chih [declaration of the] pleasure of His Majesty, as often as not, translated Imperial Decree: although this is more commonly shang yü, the words of the Emperor.

(3) In the manuscript forwarded by Prince Kung the words Ta Tsing and Ta Ying are alike written two places above the rest of the text.

Ministers be treated with consideration (4), [under which any person guilty of] disrespect towards him, or of insolence or the like, is to be punished most severely by the local authorities. [In the same treaty] are laid down with great distinctness rules to regulate the collection of the duties and the recovery of debts.

During the ten years that have elapsed of intercourse between the mercantile communities of different states and the people of China, since the ratifications were exchanged, although there have been some chance disagreements between them, there has been no intention on the part of the well conducted and peaceable (5) to wrong [the people of] China; and the officials and people of China have on their side behaved with all civility.

[50]

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(4) The word "privileges" in Article IV of the Treaty is rendered by the Chinese word here employed.

(5) To wrong either by fraud or oppression.

[So] in the collection of the duties on foreign trade by the several custom-houses, although [this has been effected] in accordance with treaty, there have been here or there in the interior instances of surcharge (6); [while in the matter of debts] if in the trade between Chinese and foreign merchants, there have been here and there debts due by foreign merchants to Chinese long outstanding, the debts due by Chinese to foreign merchants long outstanding, have been, on the other part, not few (or small).

To the end that no undue favor might be shewn [to the Chinese] instructions have been sent, as occasion required, to the provincial governments to deal with them impartially and completely.

The British Minister residing in Pekin has, [notwithstanding,] come

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(6) Cases of wrong collection; rather, however, according to the text, accidental than intentional.

come to the Yamen of Your servants to complain that the people of China are in the habit of behaving disrespectfully to the officials and people of foreign states; that the Chinese authorities, so far from taking steps to restrain them, do on the contrary display (or, allow to appear) an unfriendly spirit, and that the common people, under the influence of what they are constantly seeing and hearing (7) become actuated by this in a yet more serious degree: that the merchants are over taxed by the Custom-houses: that, in some instance, they suffer by a want of vigilance on the part of the officials, to whom they should look: that in some, they are defrauded by the Government bankers, or by ordinary traders, and that the authorities, instead of compelling the debtors to pay, screen them from justice: the result of which is

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(7) literally: their ears flooded, their eyes dyed or discolored.

is that there is an arrear of cases, the accumulation of years, unsettled.

He requests that representation be made to the Throne, and that Your Majesty be requested to issue a decree commanding [the provincial governments] to obey.

Your servants have also received an official communication [from the British Minister] to the effect that in a [late] discussion on business with the magistrate of the District of Kuang-toi in Ho Peh (8), the local authority stated that he had never read the Treaty.

It is the humble opinion of Your Servants, that the officials and people of foreign states who come to China [respectively] to administer affairs and to trade, are undoubtedly entitled under the treaties to be

treated

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(8) The discussion regarded the tenure of some property held by a British Missionary.

treated with civility: farther, that, in as much as the well conducted and peaceable persons belonging to foreign states have no desire to wrong [the people of] China, the officials and people of China have certainly no right to persist in maintaining towards [the people of] foreign states a feeling of contempt or disrespect: that, in the matter of collection of duties by the Custom-houses, these should be levied by them in accordance with the treaties, and that they should not [levy duties] otherwise: - that, in the matter of debts owing on either side, if the Chinese government do not expeditiously clear off the debts that have been long due by Chinese merchants, [they, Your Servants know not,] how foreign governments can be called on to take steps for the settlement of debts, that may have been long owing by foreign merchants to Chinese merchants.

The government of China in the conduct of affairs holds ever fast

to

to justice (9) : yet more is it obligatory, in cases in which China and foreign states are jointly interested, on one side as well as the other, to act with impartiality. It becomes, therefore, the duty [of Your servants] to request that Your Majesty will be pleased to issue instructions to the provincial governments insisting upon a faithful observance of the treaty (or treaties) of the tenth year of the reign Hsien Fêng, and upon the duty of behaving to the officials and people of foreign states with civility upon all occasions: [directing them at the same time,] as the lower classes may not be acquainted with [the treaties], to call on them one and all in notifications to obey them

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(9) In its own affairs, and the argument is that a fortiori it should be just in mixed questions; but this is logically damaged by the introduction of the words, on one side as well as the other.

them; and to remember that as regards the Ministers of foreign states residing in the capital, they are to shew them the same respect as they shew to the officials of China, and that disrespectful or insolent conduct towards them will not fail to be punished most severely.

As regards unacquaintance with the treaties on the part of the local officials, orders must be given them by the heads of all the provincial governments alike that they do read the treaties.

The refund of duties in cases where it is an ascertained fact that duties have been levied as they ought not to be, on foreign merchants by Custom-house or barriers, and the repayment of debts long owing by Chinese to British merchants, are questions that ought to be looked into by the ministers superintendent of trade. The junior of Your servants has repeatedly written to them to seperate the claims that are to be satisfied

satisfied from the claims that are not, and to close the cases open with all speed.

[If action be taken in the way Your servants recommend] all mixed cases for some time to come, may be disposed of in such wise as more or less to give evidence of ~~peaceful~~ intentions, and to cause quarrels to be avoided.

The propositions which Your servants have agreed together to recommend, in order to a better understanding of the treaties, they submit in a memorial reverently prepared, and prostate they implore the glance of Your Sacred Majesty thereon.

A respectful memorial [whereon] they request Your Majesty's Pleasure.

Note — The above translation has been made from a copy of the text communicated to Mr. Wade by Prince Kung. In the manuscript edition of the Peking Gazette issued on the evening of the

1st.

1st March, there were added the
following words:

"The Great Council has had
the honor to receive His Majesty's
Pleasure as follows "So be it".
Respect this."

Ext / Ack May 23 ask

DEPARTMENT OF STATE RECEIVED MAY 23 1872

Mr. Pratt Copy as marked with red

No 138 3 Enclosures

Legation of the United States
Peking March 15 1872

Frederick F. Low
to
Department of State

FOREIGN Relations '72

Subject

Marriage of the Emperor.

Encloses translations of three Edicts naming the future Empress & three additional wives.

No 138 3 Enclosures

Legation of the United States
Peking March 15 1872

Sir:-

I have the honor to (Copy) enclose translations of three Imperial Decrees all relating to the approaching marriage of the Emperor. These Decrees are issued in the names of the Empress Regents; they have been officially promulgated in the "Peking Gazette".

Rumors with reference to the approaching marriage of the Emperor have been current

Hon Hamilton Fish from
Secretary of State

from time to time for a year or more past, but as they could not be traced to any reliable source I have not deemed it advisable to refer to the matter until some official information could be obtained.

In accordance with established customs among the Chinese concerning marriages the Emperor appears to have had no voice in the matter, — his parents making the selection of the wives and deciding upon all the details. Whatever faults may be founded in those who decided the momentous question, illiberality as to the number

number of wives cannot fairly be charge as one. The strange anomaly in the whole affair is, that one of the concubines is the mother of the future Empress.

With a view of ascertaining if possible whether political considerations influenced in any way the selection of the Empress. I have endeavored to gather all the information possible concerning her family history.

She is a plebeian of Mongol descent, although her ancestors on either side have held high official positions in

in the Empire. Her grandfather on the fathers side, Sai-Shang-a, was an official of note and held high rank and position under the former Emperor Hsien Feng. In 1852 he was sent at the head of a body of troops to suppress the Taeping rebellion. Having failed to accomplish the object for which he was sent he was degraded and his property confiscated. The buildings occupied by the Foreign Office since 1861 were originally Sai-Shang-a's private residence. He is still living in retirement. His son Ch'ang-Ch'i, the

father

future
father of the Emperor, is an
official in the Han-lin, or
Imperial Academy, and is
distinguished for his great
literary attainments. He
graduated at the Academy
in 1865, being among the
successful ones in the
competition for the Doctors
degree. Subsequently those
who had obtained the degree
of Doctor were re-examined
before the Emperor, at which
Ch'ang-ch'i took the first honors
which entitles him to the rank
of Chang yüan. This title
corresponds very nearly with
that of Senior Wrangler at the
Universities

Universities of Oxford & Cambridge England.

The mother of the future Emperor is the daughter of Tuan-hua (Prince Chêng) who with his brother, Su-Shun, and Prince I, were the confidential advisers of the late Emperor Hsien Fêng. It is supposed that these three men were mainly responsible for the stubborn and impolitic course of the late Emperor in 1859-60 which resulted in the occupation of Peking by the English and French forces.

Upon the death of Hsien Fêng these men attempted to usurp the authority of the government and

and declare themselves Regents
in place of the legitimate +
successors, the Empress and
Prince Kung. Soon after
the present government finally
took possession and formally
established the present Regency
in November 1861, the leaders
of the opposition movement
were put to death; - Su-shun
was publicly beheaded on the
common execution ground,
and Tuan-hua and Prince I
were mercifully allowed to
strangle themselves.

This line of ancestors
being on the mothers side,
it is much less probable
that

Mgt

that the selection of the Empress was governed by political considerations other if it were on the side of the father. Indeed I am unable to obtain any information which leads me to believe that the approaching marriage indicates in any way political significance. It is barely possible that among the Chinese it may be considered a conciliatory stroke of policy towards a discontented faction. Viewed from our stand point the Empress' family may, I think, be fairly considered as belonging to the extreme anti-

anti-foreign party; at the
same time it may be doubted
whether this entered into the
calculation of those who
made the election.

I may add that the
fact of declaring the Emperor
of suitable age to marry does
not declare him Emperor de facto.
It is however improbable
that the Regency will be
continued any considerable
time after the marriage;
indeed I shall not be
surprised any day to hear
that the Emperor has taken
the reins of Government
into his own hands, even
before

before his marriage

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

Enclosures

No 1 Imperial Edict naming the future Empress

No 2 Imperial Edict naming three Concubines for the Emperor

No 3 An Imperial Edict fixing the months of October within which the Imperial marriage is to take place

Enclosure No 1 Copy
Despatch " 138

From Peking Gazette 12th March /72

A benign Edict has, with profound respect been received from their Majesties Tzu An (The Benevolently Tranquil) the Empress Dowager, and Tzu Hsi (The Benevolently Happy) the Empress mother in language as follows;

Eleven years having now elapsed since His Majesty the Emperor in his infancy succeeded to the Throne, it is meet and proper that a worthy consort should be found to occupy the principal seat in the inner Palace and to assist his Majesty in administering the government with virtue, as well as to superintend the Royal Household. We have therefore selected the daughter of Chung-S, a member of the Imperial Academy and Reader to his Majesty, whose family name (Mongul) is A-lu-te;
She being accomplished, cautious, correct, and sedate, we decree shall be Empress.

Respect this!

Enclosure No 2
Dispatch # 138
Copy

From Peking Gazette March 12th 1872.

A benign Edict has been received from their Majesties the Empress Dowager and the Empress Mother as follows:

The daughter of Tsêng Hsün, a Secretary of one of the Boards (the Board of Punishment) whose family (Manchu) name is Tu-chia, we decree shall be His Majesty's Hui Fei or Intelligent Consort. (First Concubine.)

The daughter of Chüng Ling, a Prefect whose family (Manchu) name is Ho-shê-li, we decree shall be His Majesty's Yu-pin or Lustrous Consort. (Second Concubine.)

The daughter of Sai-shang-ah lately a Lieut-Genl whose family (Mongol) name is A-lu-te we decree shall be His Majesty's Hsün-pin or Generous consort (third concubine.)

Respect this.

Enclosure No 3
Despatch 9138
Copy

From Peking Gazette March 12th 1872

A benign Edict has been received from their Majesties the Empress Dowager and the Empress Mother as follows:—

In keeping with the rules of Ceremony on the occasion of an Emperor's marriage, we decree that the Imperial Astronomical Board shall fix upon an auspicious day in the 9th month (Oct: 2-31) of the present year for celebrating the marriage of the Emperor. We appoint Prince Kung and Pao Chün, President of the Board of Revenue who will concert plans with the proper Boards (Boards of Ceremonies and Household office) clearly establishing the necessary rules and using respectful diligence in the management of the business.

Respect this.

Mr Pratt

Ltr
ack
May 23
ack

DEPARTMENT OF STATE
MAY 23 1872
RECEIVED

No 139 One Enclosure

Legation of the United States
Peking March 18 1872

Frederick F Low.
to
Department of State

Subject

Appointment of two new members of the Tsung-li-Yamen (Foreign Office) - Chungkow and Hsia-cha-how.

Encloses note from Prince Kung

No 139 One Enclosure

Legations of the United States
Peking March 18 1872

Sir:-

I have the honor to inclose translation of a despatch from Prince Kung communicating a Decree appointing two new members of the Foreign Office. (Tsung-li-Yamen) - Chungkow and Hsia-Cha-how. The former is a Manchu and the latter a Chinese. Chungkow has lately returned from France, where he was sent on an expiatory mission in connection with the Hon Hamilton Fish the Secretary of State

the Tientsin Massacre. His
reception when he returned to
Peking is understood to have
been extremely cordial by all
grades of officials from the
Emperor down, and his
almost immediate assignment
to duty in the Foreign Office
indicates in a very marked
manner the confidence of
the Government in his ability
to manage foreign business.
It is also an indication that,
in the opinion of the Court,
the mission abroad has been
skillfully managed and brought
to a satisfactory conclusion.
Chungkow has had considerable
experience

experience in dealing with foreign questions which, with the information he must have obtained during his recent visit to Europe and America, ought to render him a valuable acquisition to the Foreign Office. Unless hampered by opposing influences too strong for successful resistance he will, I think, be disposed to deal fairly, perhaps liberally with foreign questions. Time and experience will, however, alone determine the result.

Hsia-Cha-how has been for some years a Secretary in

in the Foreign Office. He is, so far as I can learn, a man of no distinction. His promotion is, I suspect, chiefly due to the fact that a Chinese had to be appointed as an officer to the Manchu, Chungkow. It appears to be an inflexible rule, which has obtained since the commencement of the present dynasty, that all the higher civil posts shall be occupied by an equal number of Manchus and Chinese.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Enclosure

No 1 Imperial Decree appointing Ch'ungh'ow and Hsia-Ch'a-how members of the Tsung-li-Yamen

Enclosure No 1
Despatch " 139

Prince Kung makes a communication. On the 26th day of the 1st moon of the 11th year of T'ung Chih (5th March 1872) the Inner Council had the honor to receive His Majesty's commands as follows:— We command that Chung Hou, a left Vice President of the Board of War, attend and do duty in the Tsung-li Yamên. We command that Hsia Chia-hou, a Shao-Ching (name of a post) in the T'ai Ch'ang Ssŭ and Chang-Ching (name of a post) in the Tsung-li Yamên, attend and do duty as one of the Ministers in the said (i.e. latter) Yamên. Respect this.

In respect and obedience to the above it is the Prince's duty to communicate this to Your Excellency to take note of.

A necessary communication addressed to His Excellency T. F. Low, U. S. Minister resident at Peking.

T'ung Chih 11th year, 1st moon, 28th day (7th March 1872).

Mr Pratt

acknd
send him copy of Inst
of this date to consul at
Amoy
Ch July 1

Did so 5th July

No 140 One Enclosure

Legation of the United States
Peking March 21- 1872

Frederick F Low

to

Department of State

Subject

Complaint of the Consul at Amoy of the neglect on the part of the Legation to give him instructions.

Encloses Copy of the Consuls despatch and states the circumstances

- stances of its receipts and the reason why it came to be overlooked.

No 140 One Enclosure

Legation of the United States
Peking March 21 1872

Sir:-

I have received from the Consul at Amoy a copy of his despatch dated February 29th to Admiral Rodgers with sundry enclosures. Among the latter is a copy of the Consuls despatch No 163 to the Department, in which, I observe, complaint is made that this Legation has failed to send him instructions as had been

Hon Hamilton Fish
Secretary of State

been requested, concerning certain arrangements in Formosa. This neglect the Consul affirms has seriously interfered with his movements, compelling him virtually to "remain inactive at Amoy."

Complaints having been made officially to the Department twice at least, and reiterated to Admiral Rodgers, it may not be inappropriate for me to state the circumstances attending the receipt of these despatches and the reasons why the Consul failed to receive a reply to the last one.

The first of the despatches referred

referred to was received by my predecessor Mr Browne, who it appears took such action as in his judgement seemed proper; - the other, No 53, copy of which is herewith enclosed, was addressed to Mr Williams and reached Peking June 6. 1870, when I had been here less than two months.

In order that I might be able to present the case intelligently to the Yamen it became necessary to make myself acquainted with the history of what had occurred previously with reference to Formosan affairs. After this had

had been done and before
a convenient opportunity offered
for laying the matter before
the Government, the Tientsin
massacre occurred, (June 21)
which for a considerable time
occupied the entire attention
of all officials, both native
and foreign, to the exclusion
of all other business. Before
any lull had occurred in the
excitement springing from
the Tientsin tragedy a despatch
was received from the Consul
at Amoy announcing his
departure, on account of ill
health, for the United States,
and stating that he had turned

the

the Consulate over to a
merchant named Pye.
As it did not seem probable
that the locum tenens, then
in charge would undertake
to settle important business
connected with Formosan affairs
I deemed it the wiser plan
to let the whole question
remain in abeyance until
the return of the old Consul
or a new one should be
appointed. In this way
the matter came to be over-
looked; nor was my attention
drawn to it again by Mr
Le Gendre until the receipt
a few days since, of his
despatches

despatches to the Department and the Admiral.

This to be regretted that Mr Le Gendre should have thought it necessary to bring this matter to the attention to so many others before he did to me. Time, labor, and paper, would have been economised had he, upon his return to China, reminded me that a decision of the Government upon his proposition was important. Had this been done the Consul would have learned that the Imperial Government entrusts the management of Formosan affairs to the Provincial Authorities

authorities of Fukien, and that if an agreement can be come to between the Consul and the Viceroy concerning the proposed arrangement Imperial sanction will be almost certain to follow; without the approval of the provincial authorities first obtained it will be difficult if not impossible to effect any arrangement with the Peking Government.

But while it is unfortunate that a want of attention on the part of the Legation has, for a time, prevented the Consul visiting Formosa, it is a satisfaction

to

to know that the action of the Admiral in placing a vessel at Mr Le Gendre's disposal will now enable him to carry out his intention and thus obviate the necessity of "remaining inactive at Amoy"; it will also gratify the oft-expressed desire of "the Chief of the aborigines," - to see his friend, the Consul.

It is proper that I should observe in this connection, that since Mr Consul Le Gendre's return to China the only information which the Legation has received from him has been copies of a portion

portion of his despatches to the Departments, and a printed "letter" addressed "to "De B Randolph Keim Esquire" entitled "How to deal with China"

I am quite free to confess my surprise when I read in the letter to Mr Keim the remarks of the author in which he says "I have "been at variance with my "superiors in Peking," and I thought it not improbable that the Consuls disinclination to furnish information to, or correspond with the Legation was because of the "variance" alluded to, of which I am

in

in entire ignorance. If, however, the meaning and intent of the writer can be ascertained from reading this brochure, of which I am by no means certain, the "variance" of which the Consul speaks is between him and the Government of Great Britain and the United States, and not with the Legation.

The questions at issue appear to be whether the British Government has the right to disapprove of the acts of its Consuls, and whether the war-making power of the United States is vested in Congress

or

or the Consuls. The British Government is evidently of the opinion that it has the sole right to judge of the propriety of the acts of its Consular officers; the other question is, so far as I know, definitely settled by the Constitution — that Congress alone possesses the war-making power.

Mr Le Gendre evidently entertains different opinions, hence he has concluded to address himself exclusively to the Department as the most convenient and direct way of convincing the Government of its error, and thus bringing its policy

policy into accord with the views of the Consul.

I may add that I have the highest respect for the intelligence and energy of Mr Consul Le Gendre; nor would I detract in any manner from his well earned reputation as an honest and faithful public officer. But, while conceding full credit for the faithfulness and energy displayed in the performance of his arduous and oftentimes delicate duties, I may be permitted to suggest that Mr Le Gendre's usefulness would be largely increased were he to

confine

confines his attention to the legitimate business within his Consular jurisdiction, and leave others to manage the affairs entrusted to their charge according to their own judgment and the instructions of the Department.

In conclusion allow me to say that, so far as I am concerned, there is no "variance" between the Consul and this Legation which will interfere in the slightest degree with my rendering him the Consul the most cordial and efficient support possible in all things

things where my aid may be necessary.

A copy of this despatch has been sent to the Consul at Amoy.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

Enclosure

No 1 Despatch from C. W. Le-Gendre to S Wells Williams dated May 4. 1870

Enclosure No 1
Dispatch # 140

Received June 6th. No 53.

Consulate of the United States,
Amoy May 4th. 1870.

His Excellency S. S. Williams
U. S. Chargé d' affaires
Pekin.

Sir,

On the 12th. of November, Intelligence was received in Takao that a boat belonging to Messrs. Mellish & Co of Tamsui, had been wrecked at South Cape, that Wm. Horn a British subject, had been drowned, and that two Malays, together with the Chinese crew were in the hands of the aborigines, who, in accordance with their understanding with me, had sent to Mr. Pickering to give information of the fact. Three of the Takao community, among them, an officer of the Imperial Maritime Customs, immediately visited the spot indicated, and were well received by the Chief of the Eighteen Tribes. Tok-e-Tok, the castaways had been well

treated

treated and their freedom was promised upon certain expenses claimed by the Chinese and Hakkas of the border being paid amounting to $200.

The Intendant of Formosa, Lee Taotai, on being requested by me to send to the Border Hakkas and take delivery of the castaways (Enclosure No 1.) at once despatched one officer and Eight men, and the Mission was successful (Enclosure No. 2).

On the 16th of February, the General, Taotai and Prefect of Formosa sent me a joint communication proposing not to build a Fort at Tassenpong, but to take other measures instead (Enclosure No. 3). My answer to these officers will, I hope, meet with your approval (Enclosure No. 4).

In connection with this new plan of settling matters in Southern Formosa, I may be permitted to express the opinion that if the Imperial Government will allow the Commissioner

of

of Customs at Takao to do, in his official capacity, and as the Agent of the Chinese Government, what, for the last three years, I have done at my individual expense and upon my own responsibility, with the Tribes of Southern Formosa, for the maintainance of good feelings with them; if at the same time, they promise to faithfully maintain the order of things which they say they have inaugurated at the South of the Island (Enclosure No. 4), the erection of a Fort at Tassenpong may be dispensed with. And, if this is done and a special agent must be appointed to act under the orders of the Commissioner at Takao, I hope that the claims of Mr. Dickering's _____, who has done so much for the cause of humanity in Southern Formosa, will not be ignored (See my despatch to the Hon. Wm. Burlingame, dated Nov. 7th. 1867 — closing paragraph — Dip. Cor. 1868 —

part

part 1 page 504, also my despatch to
Mr. J. R. Browne U. S. Minister
Peking, dated 31st. March 1869).

I have the honor to be
Sir,
Your obedient Servant,
(sd.) Ch. W. le Gendre
U. S. Consul.

Ack May 23 ans. Mr. Pratt

No 141 One Enclosure

Legation of the United States
Peking March 24. 1872
Frederick F Low
to
Department of State

Subject

Death of Tseng-kwo-fan,
Governor-General of the Provinces
of Kiangsu, Nganhui & Kiangsi.

Encloses translation of
an Imperial Edict upon the subject.

No 141 One Enclosure

Legation of the United States
Peking March 24 1872

Sir:-

I have the honor to inform you of the death of Ting-Kwo-fan, Governor-General of the provinces of Kiangsu Nganhwui and Kiangsi, news of which reached Peking on the 18th instant. On the 21st there appeared in the Peking Gazette an Imperial Edict announcing his death, and bestowing tokens of Imperial favor upon the deceased and Hon Hamilton Fish his Secretary of State

his family. A translation
1 this Edict I beg to enclose.

Tseng-Kwo-fan was
one of the few distinguished
officials upon whom the
Peking authorities relied for
counsel in the management
of foreign affairs, and his
death will be a great loss
to the Government. He was
more generally known to
foreign Governments than
almost any Statesman in
the Empire. His position
for many years as Superintendent
of Trade for the Southern Ports
had brought him into direct
contact with the mercantile
interests

interests, and the knowledge
gained of Commercial affairs
during the past two years
rendered him one of the most
useful as well as the most
influential men in the Country.
He has generally been regarded
as anti-foreign in his pro-
-clivities. Experience had
however gradually liberalized
his ideas, so that at the time
of his death foreigners of
all shades of opinion were
looking with considerable
confidence to the influence
of Tsêng-Kwo-fan for the
removal of the restrictions
upon trade and the
inauguration

inauguration of other needed reforms.

His permanent successor has not yet been named.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

5

Enclosure

No 1 Imperial Decree announcing the death of Teng-Kwo-fan and bestowing posthumous honors upon him

Enclosure N° 1
Despatch " 141

Translation of Peking Gazette of the 13th. day of the 2d. month (21st. March 1872).

Edict. Tsêng Kuo-fan, a Grand Secretary and Governor-General of the two Kiang provinces, was a man of genuine literary attainments, of talents distinguished, vast and deep; his natural disposition was loyal and honest, and his self-command pure and correct.

His Majesty the Renowned Ancestor, canonised as the "Successful" (the Emperor Tao Kuang), recognizing his superiority, graciously selected Tsêng Kuo-fan from among the members of the Imperial Academy and advanced him to the Vice-Presidency of one of the Boards. During the reign of Hien Fêng he organized and led an army against the T'ai-p'ing rebels, operating against them in various provinces, and was frequently the recipient of Imperial favors.

By His Majesty the Accomplished Ancestor, canonized as the "Illustrious" (the Emperor Hien Fêng), he was further

advanced,

advanced to the distinguished honor of Governor-General of the Two Kiang provinces, Imperial Commissioner, and Commander in Chief of the Army.

We, having come to the Throne, appointed Tsêng Kuo-fan a Grand Secretary and reposed great confidence in him. The establishing of tranquility in the Eastern and Southern provinces was largely due to his exertions. For his rapid victory in retaking the City of Nanking, the hereditary and perpetual rank of "Brave and Enduring" Marquis of the 1st. grade was conferred upon him, as well as the double-eyed Peacock feather. He was always entrusted with the high responsibility of governing two provinces; and his experience and success challenged universal admiration. Truly was he a pillar of strength (lit. thigh, arm, heart, and backbone) to the State. We were hoping that he would still for many years live to enjoy our bounty and esteem when suddenly We were shocked and grieved to hear of his death.

We

We hasten to confer upon Tsêng Kuo-fan the posthumous title of "Royal Chief-Preceptor", and in accordance with the Regulations of the Grand Secretariat the customary presents shall be given, besides which Taels 3000 shall be taken from the Treasury at Nanking and conferred to defray the funeral expenses.

Mr Têng-ah is specially sent to offer sacrifice to the departed. Further, we bestow the posthumous title Wên Cheng (the "accomplished and Upright"). In Peking sacrifice will be offered to the deceased in the Chao Chung Temple and the Hien hsiang Temple. Temples shall be erected to his memory in his native place in Hu Nan and in Nanking. An account of his life and works shall be written and recorded by the historiographers. All entries against him shall be erased from the Record. Let the Records be examined by the proper Board and rewards be made for any wounds he may have received in battle. When his

body

body is in course of removal to his native place. We command that local officials shall give safe escort and show proper honors.

We decree that Tseng Chi-tsê, son of the deceased, receive his late father's rank, Marquis of the 1st. grade; he need not present himself at Court for audience. Hs Ching will investigate and prepare a memorial in behalf of the other sons and the grandsons of the deceased, that Imperial bounty may be conferred upon them.

Thus will be made manifest the sincere regard We have for the loyal and virtuous.

Cwd/ Ack May 23 ; Ack

Mr Pratt

Copy & Ltr

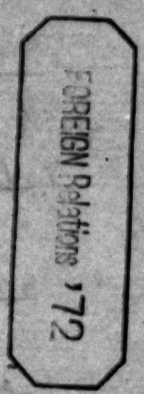
No 142

Legation of the United States
Peking March 20 1872

Frederick F Low

to

Department of State



Subject.

Marriage and probable assumption of authority of the Emperor.

Gives further particulars about the proposed marriage; thinks it not improbable that a declaration that he is Emperor de facto will

be made ab or about the date of the marriage, thinks that as soon as this takes place that most foreign Governments will, and all should, urge that their representatives receive the courtesies usual among civilized nations. and states that some of the Ministers here already given the same opinion to their Governments by telegraph.

Asks for instructions as to the course that shall be pursued in case the audience question should come up.

No 142

Legation of the United States
Peking March 25 1872

Sir:-

Since closing my N° 138 of the 15th instant in which you were informed of the Emperors proposed marriage in October next, several additional Decrees concerning the same subject have been issued. From them I learn that the 16th of October is the day fixed upon for the marriage; that the betrothal presents are to be bestowed on the 20th of August

Hon Hamilton Fish and
Secretary of State

and the wedding presents on the 19th of September.

In returns for the favors granted to him the Emperor has, by Decree, conferred additional laudatory titles upon the Empress. It is also expected that, in accordance with long established custom and precedent, there will be a special dispensation of Imperial bounty, in the form of brevet rank and titles to officials and several months extra pay to the soldiers, when the marriage takes place.

The belief is becoming general that the marriage

of

of the Emperor and his accepion to the throne as Sovereign de facto will be simultaneous. So strong is this belief that I have reason to think that some of the foreign representatives have already sent telegrams to their Governments stating this fact and asking for instructions in regard to making a demand for audience.

My opinions upon the audience question were fully stated in my No 57, to which I now, most respectfully, beg to refer you. Experience confirms me in the opinion

there

Rich

them expressed— that a demand
made simultaneously by all
the Treaty Powers will secure
the concession, the importance
of which is more apparent
now than it was a year ago.

And while I am not
sanguine that audience of the
Emperor will prove such
a panacea as some appear
to imagine, still my opinion
is that a failure on the part
of foreign Governments to
insist upon it will confirm
the high officials in their
arrogance and conceit which
will be damaging to foreign
interests and lead to the
interruption

interruption of friendly relations ah no distant day.

This question assumes increased importance as the time approaches for its solution; I have therefore most respectfully to again bring it to your notice and to ask for instructions for my guidance in dealing with it.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

Ack. a favorable adjustment of cannot out
Ack. May 24
Mr. Pratt

No 143

Legation of the United States
Peking March 27. 1872
Frederick F Low
to
Department of State

Subject

A missionary case in Peking.

Reports having made an arrangement with Prince Kung which, if carried out by the Chinese Govt. will dispose of the question.

No 143

Legation of the United States
Peking March 27 1872

Sir

The missionary case
mentioned in my No 134 of the
20th ultimo is not fully settled,
although some progress has
been made in that direction.
The whole questions remained
in the condition it was at the
date of that despatch until
the 8th instant when I met
by appointment, Prince Kung
and all the members of the
Foreign Office except one, to
Hon Hamilton Fish discuss
Secretary of State

discuss and, if possible, arrange the whole difficulty. After a full and free discussion of the whole question we finally agreed upon the following:- The Yamen to procure another place in the same City where the premises in question are situated, which will be a fair equivalent for the property recently purchased by the Mission, and which shall be satisfactory to me. Upon my approval of the new premises an exchange shall be made and the Mission remove to the new place provided by the Yamen; and until the exchange agreed upon

upon shall be made the Missionaries are to remain in the quiet possession of the property at present occupied and be protected in the peaceful pursuit of their calling; the broker Wang-tsia-ying to be released from bail and not re-arrested or punished for anything he may have done in procuring the property about which the dispute arose.

This arrangement seemed to me a good one for all concerned. If an exchange be made the new premises would be provided by Imperial authority, which would relieve the

whole subject of all question as to where the missionaries shall reside; it would also give an authorized endorsement to the proper pursuit of their calling. On the other hand it would afford a convenient way for the Prince and the Ministers to relieve themselves from the further discussion of an embarrasing question which possibly may have been forced upon them by the hostile local officials and the reactionary party in the Government here.

I should observe in this connection that in the discussion

discussion of this subject neither the Prince nor any of the Ministers raised the question as to the right under the treaties of the Mission to purchase premises in the Chinese City;— the inconvenience of having a Christian Chapel located on the particular street upon which the property recently purchased by the Mission is situated, seemed to be their chief objection.

A few days after my interview with the Prince the Chapel was opened and has continued open up to the present time. This has caused

caused no noticeable excitement;
on the contrary the people seem
to be peaceable and well disposed.
I cannot say as much for
the local officials, who seem
indisposed to submit quietly
to the settlement which has
been agreed upon between the Prince
and myself. Simultaneously
with the opening of the Chapel
the broker was re-arrested and
thrown into prison, but upon
my reporting their action to
the Foreign office an officer
was sent who took the man
from the hands of the local
officials. He is now under
the protection of the Yamen.

This

This is the situation of the case at the present moment. I shall however not be surprised at entirely new developements any day, for it seems not improbable that all the reactionary forces in Peking are being brought to bear to compel the Prince to recede from the agreement he has made.

Unless incited by the local officials there is little danger of any popular disturbance. The people are either indifferent or well disposed; the only signs of hostility come from the officers of lower rank.

Fear

Fear of untoward consequences personal to themselves will, I hope, prevent the latter from resorting to extreme or violent measures.

The arrangement made with the Prince materially simplifies the question, relieves me from embarrassment in its discussion, and enables a fresh point of departure to be taken. In its future management I shall endeavor to act with firmness and discretion so that the final result may, in addition to securing justice to those directly concerned, be useful in

the

the managing of this most
difficult question (Mormons)
in the future.

When the case is
closed I shall send a full
report of my proceedings, and
copies of the correspondence
between the Yamen and myself
concerning it.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Ent

Returned to Dept May 24 1872

DEPARTMENT OF STATE RECEIVED MAY 23 1872

Mr. Pratt

No 144 One Enclosure

Legation of the United States
Peking March 31. 1872

Frederick F Low

to

Department of State

Subject

Encloses copy of a despatch to the 5th Auditor which covers his accounts for salary to December 31. 1871. States that he has drawn on Dept. against balance found due him of 15 taels for $1000-

i.e. Claimed to be due

No 144 One Enclosure

Legation of the United States
Peking March 31. 1872

Sir:-

Enclosed I have the honor to hand you a copy of my despatch to H. D. Barrow Esq, 5th Auditor of the Treasury, in which was enclosed my account for salary to December 31. 1871.

Against the balance due me I have drawn on you at 15 days sight for $1000-.

I have the honor to be
Sir
Your obedient servant
Frederick F Low

Hon Hamilton Fish
Secretary of State

Enclosure

No 1 Mr Low to H D Barrow

March 1. 1872

Enclosure No 1
Despatch " 144

With one account and 10 Vouchers.

Legation of the United States,
Peking, March 1st 1872.

H. D. Baron Esq.,
5th Auditor U. S. Treasury,
Washington.

Sir,

I have the honor to send herewith my account for salary as Envoy Extraordinary & Minister Plenipotentiary to China from January 5th 1870 to December 31/71 inclusive, shewing a balance due me of $ 1981.64 Ten vouchers accompany the account.

The delay in sending this account has been caused chiefly by the amendment to the law levying income tax, the precise nature of which I was not sure about until after I had asked and received information from the proper authority.

The time between January 5/70 and April 20/70 was consumed in travelling to my post of duty.

You

You will observe that credit for premium on the dollars received in payment for my drafts for salary, which credit has, I understand been usual heretofore, is omitted in my account. Whatever reason there may have been originally in making such a change I do not propose to discuss. If such a change is proper it should apply to all salaries that are paid in dollars, or not at all. There certainly can be no valid reason for applying it to the officers of this Legation alone. If my information is correct no charge of this nature is made upon the salaries of the Minister and Consuls in Japan nor upon the Consular salaries in China. Indeed, so far as the Consulates are concerned, it cannot be, for the Consular Regulations for 1870, p. 360, form 137, fixes the value of Mexican and Spanish dollars at par. At this rate the Consuls collect their fees and receive their salaries. The officers of the Navy in the Asiatic Fleet are also paid

in

in Mexican dollars at par. I have therefore to request that the officers of this Legation be placed on an equal footing with the officers of the diplomatic and Consular service in Japan and the Consular and Naval officers in China. I cannot suppose that the Treasury Dept. will continue to make an invidious distinction against the members of this Legation when once the facts are brought to its attention.

Trusting that the account herewith may be found correct and be approved,

I am, Sir,

Your obedient Servant,

Mr Pratt

DEPARTMENT RECEIVED JUN 25 1872 CF

A & Ed

No 1145 — One Enclosure

Legation of the United States
Peking April 10. 1872

Frederick F Low

to

Department of State

Subject

Revenue and foreign trade of China.

Encloses "The Returns of Trade at the Treaty Ports for the year 1871."

No 145 One Enclosure

Sir:-

I have the honor to send herewith "The Returns of Trade "at the Treaty Ports in China "for the year 1871."

The increase in the revenue, exceeding as it does that of 1870 by nearly Two millions taels, must be gratifying to the government; it also indicates that foreign trade is developing in a satisfactory manner.

I have the honor to be

Hon Hamilton Fish Sir

Secretary of State Your

Your obedient Servant
Frederick F. Low

Enclosure

No 1 Returns of Trade for the Treaty Ports in China for the Year 1871

Enclosure N° 1
Dispatch " 145

RETURNS OF TRADE

AT THE

TREATY PORTS IN CHINA,

FOR THE YEAR

1871.

PART I.—ABSTRACT OF TRADE AND CUSTOMS REVENUE STATISTICS, FROM 1864 TO 1871.

PUBLISHED BY ORDER OF

The Inspector General of Customs.

(Published 22nd March, 1872.)

SHANGHAI:
PRINTED AT THE CUSTOMS PRESS.
MDCCCLXXII.

RETURNS OF TRADE

AT THE

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FOR THE YEAR

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RETURNS OF TRADE

AT THE

TREATY PORTS IN CHINA.

FOR THE YEAR

1871.

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The *Haikwan* Tael, in which the Customs Revenue is stated, is equivalent—

in English money, to 6*s.* 6*d.*,

„ American „ „ $ 1.58,

„ French „ „ francs 8.14,

at the average Sight Exchange on London for 1871.

The *Shanghai* Tael, in which the Values for Shanghai and the Ports south are stated, is equivalent—

in English money, to 5*s.* 10*d.*,

„ American „ „ $ 1.41,

„ French „ „ francs 7.30,

at the average Sight Exchange on London for 1871.

Haikwan Tls. 100 = *Shanghai* Tls. 111.4

The Values for the three Northern and the three River Ports are given in local Taels, 104 to 106 of which equal 100 Haikwan Taels.

ANNUAL VALUE OF THE FOREIGN TRADE OF CHINA, 1864 TO 1871.

YEAR.	IMPORTS.	EXPORTS.	TOTAL.
	Taels.	*Taels.*	*Taels.*
1864,	51,293,578	54,006,509	105,300,087
1865,	61,844,158	60,054,634	121,898,792
1866,	74,563,674	56,161,807	130,725,481
1867,	69,329,741	57,895,713	127,225,454
1868,	71,121,213	69,114,733	140,235,946
1869,	74,923,201	67,143,988	142,067,189
1870,	71,000,278	61,990,235	132,990,513
1871,	78,190,093	74,860,550	153,050,643

It has to be remembered that the want of Trade statistics at Hongkong makes the Returns of the Treaty Ports but an imperfect statement of the Foreign Trade of China. The Value of the Home Trade carried on in Foreign vessels is given on page 19.

CUSTOMS REVENUE, 1864 TO 1871.

YEAR.	IMPORT DUTIES.	EXPORT DUTIES.*	COAST TRADE DUTIES.	TONNAGE DUES.	TRANSIT DUES.	TOTAL.
	Hk. Tls	*Hk. Tls*	*Hk. Tls*	*Hk. Tls*	*Hk. Tls*	*Hk. Tls*
1864,	2,420,782	4,485,246	495,752	294,799	177,678	7,874,257
1865,	2,735,524	4,696,894	401,374	269,195	186,294	8,289,281
1866,	3,266,650	4,644,913	491,606	217,732	160,971	8,781,872
1867,	3,157,445	4,879,045	478,020	203,647	146,660	8,864,817
1868,	3,287,792	5,335,655	471,316	203,614	150,097	9,448,474
1869,	3,472,821	5,546,967	488,168	223,549	147,343	9,878,848
1870,	3,569,250	5,160,938	447,343	207,815	158,631	9,543,977
1871,	3,847,989	6,384,583	569,058	204,798	209,718	11,216,146

* Under this head are included Export Duties on Native Produce carried from port to port, in Foreign vessels, for Native consumption. The amount of these Duties may be fairly estimated by taking it as double the Coast Trade or half Duty paid on the Produce at the ports where it is delivered; and may, with tolerable correctness, be apportioned between the Foreign and Home Trades as follows:—

YEAR.	DUTIES ON NATIVE PRODUCE EXPORTED TO		GIVING AS THE TOTAL REVENUE FROM		TOTAL.
	Foreign Countries.	Chinese Ports.	Foreign Trade.	Home Trade.	
1865,	Tls. 3,894,146	Tls. 802,748	Tls. 7,085,139	Tls. 1,204,122	Tls. 8,289,281
1866,	,, 3,661,701	,, 983,212	,, 7,307,054	,, 1,474,818	,, 8,781,872
1867,	,, 3,923,005	,, 956,040	,, 7,430,757	,, 1,434,060	,, 8,864,817
1868,	,, 4,393,023	,, 942,632	,, 8,034,526	,, 1,413,948	,, 9,448,474
1869,	,, 4,570,631	,, 976,336	,, 8,414,344	,, 1,464,504	,, 9,878,848
1870,	,, 4,266,252	,, 894,686	,, 8,201,948	,, 1,342,029	,, 9,543,977
1871,	,, 5,246,467	,, 1,138,116	,, 9,308,972	,, 1,707,174	,, 11,216,146

ANNUAL VALUE OF THE TRADE

COUNTRY.		1864.		1865.		1866.		1867.	
		Tls	*Total, Tls*	*Tls*	*Total, Tls*	*Tls*	*Total, Tls*	*Tls*	*Total, Tls*
Great Britain,	Imports from	11,650,758		12,369,787		15,673,297		18,830,010	
	Exports to	36,327,556	47,978,314	37,007,380	49,377,167	34,097,250	49,770,547	33,367,784	52,197,794
Hongkong,*	Imports from	10,246,599		18,121,585		18,794,207		14,177,243	
	Exports to	7,997,274	18,243,873	9,921,163	28,042,748	9,977,546	28,771,753	8,119,094	22,296,337
India,	Imports from	25,705,818		26,388,210		35,328,351		31,915,504	
	Exports to	173,930	25,879,748	14,162	26,402,372	77,815	35,406,166	366,908	32,282,412
Singapore and Straits,	Imports from	2,346,328		2,494,652		1,378,188		861,861	
	Exports to	270,451	2,616,779	460,953	2,955,605	447,486	1,825,674	376,769	1,238,630
Australia,	Imports from	187,861		335,201		481,896		547,896	
	Exports to	1,638,429	1,826,290	2,080,341	2,415,542	1,874,274	2,356,170	2,575,578	3,123,474
New Zealand,	Imports from	...		...		...		...	
	Exports to	...	...	33,186	33,186	74,104	74,104	118,781	118,781
South Africa,	Imports from	...		...		...		...	
	Exports to	...	...	...	...	...	...	35,667	35,667
British America,	Imports from	10,256		5,818		...		...	
	Exports to	643,348	653,604	641,072	646,890	93,637	93,637	...	...
British Channel,	Imports from	...		...		...		...	
	Exports to	...	...	573,100	573,100	353,422	353,422	182,221	182,221
Continent of Europe,	Imports from	22,678		153,504		259,895		40,716	
	Exports to	1,457,578	1,480,256	2,523,580	2,677,084	1,374,385	1,634,280	2,369,054	2,409,770
U. S. of America,	Imports from	3,183,021		482,593		289,832		702,683	
	Exports to	4,482,859	7,665,880	5,864,825	6,347,418	6,316,130	6,605,962	7,493,318	8,196,001
South America,	Imports from	...		81,584		35,500		...	
	Exports to	134,073	134,073	168,047	249,631	108,881	144,381	122,996	122,996
Russia (Odessa),	Imports from	...		...		...		...	
	Exports to	...	...	...	...	...	...	...	...
Siberia and Russia viâ Kiakhta,	Imports from	...		...		...		45,077	
	Exports to	...	...	...	...	...	...	924,942	970,019
Amoor Provinces,	Imports from	...		52,252		162,754		163,684	
	Exports to	6,546	6,546	1,129	53,381	8,846	171,600	18,246	121,930
Japan,	Imports from	1,832,205		2,454,478		2,932,568		2,214,489	
	Exports to	344,947	2,177,152	271,970	2,726,448	742,325	3,674,893	1,180,702	3,395,191
Philippine Islands,	Imports from	747,835		838,275		363,021		564,878	
	Exports to	220,684	968,519	228,732	1,067,007	273,756	636,777	182,158	747,036
Cochin China,	Imports from	218,679		410,062		320,059		508,363	
	Exports to	33,266	251,945	49,724	459,786	64,025	384,084	119,610	627,973
Siam,	Imports from	2,128,864		626,731		560,753		858,731	
	Exports to	93,663	2,222,527	33,129	659,860	117,547	678,300	106,670	965,401
Java,	Imports from	309,854		392,877		350,460		266,055	
	Exports to	181,905	491,759	182,141	575,018	160,378	510,838	235,215	501,270
Suez,	Imports from	...		...		...		...	
	Exports to	...	...	...	...	...	...	...	...
Total Imports,		58,590,756		65,207,609		76,930,781		71,637,190	
Less Re-exports to Foreign Countries,		7,297,178		3,363,451		2,367,107		2,307,449	
TOTAL,	Net Imports,	51,293,578		61,844,158		74,563,674		69,329,741	
	Exports,	54,006,509	105,300,087	60,054,634	121,898,792	56,161,807	130,725,481	57,895,713	127,225,454

* The Imports from Hongkong come originally from Great Britain, America, India, the Straits, and other countries.

WITH EACH COUNTRY, 1864 TO 1871.

1868.		1869.		1870.		1871.		COUNTRY.
Tls	*Total, Tls*	*Tls*	*Total, Tls*	*Tls*	*Total, Tls*	*Tls*	*Total, Tls*	
24,478,843		27,721,159		26,956,111		29,152,258		Imports from...
42,040,836	66,519,679	35,171,803	62,892,962	32,063,469	59,019,580	39,808,696	68,960,954	Exports to..... Great Britain.
15,672,685		21,427,637		21,375,847		25,376,627		Imports from...
8,970,289	24,642,974	12,309,160	33,736,797	11,391,560	32,767,407	12,505,499	37,882,126	Exports to..... Hongkong.*
26,098,085		19,745,464		19,826,232		20,923,023		Imports from...
264,530	26,362,615	149,201	19,894,665	114,154	19,940,386	234,110	21,157,133	Exports to..... India.
743,879		923,685		789,388		684,446		Imports from...
293,692	1,037,571	732,517	1,656,202	295,665	1,085,053	399,763	1,084,209	Exports to..... Singapore and Straits.
734,718		853,805		525,809		417,037		Imports from...
2,849,636	3,584,354	1,875,925	2,729,730	1,580,817	2,106,626	1,876,954	2,293,991	Exports to..... Australia.
...		...		...		...		Imports from...
102,899	102,899	98,198	98,198	22,284	22,284	106,836	106,836	Exports to..... New Zealand.
...		...		...		...		Imports from...
44,122	44,122	...	...	17,381	17,381	27,041	27,041	Exports to..... South Africa.
37		...		...		14,972		Imports from...
237,002	237,039	...	...	24,423	24,423	201,318	216,290	Exports to..... British America.
...		...		...		...		Imports from...
634,080	634,080	402,643	402,643	478,367	478,367	332,156	332,156	Exports to..... British Channel.
325,450		718,806		537,593		263,120		Imports from...
4,586,406	4,911,856	3,379,781	4,098,587	2,994,870	3,532,463	4,083,520	4,346,640	Exports to..... Continent of Europe.
833,393		1,543,991		416,445		501,105		Imports from...
6,582,676	7,416,069	9,125,549	10,669,540	8,519,480	8,935,925	11,597,745	12,098,850	Exports to..... U. S. of America.
68,318		74,418		294,910		...		Imports from...
231,630	299,948	144,278	218,696	128,941	423,851	93,725	93,725	Exports to..... South America.
...		...		...		...		Imports from...
...	...	...	...	...	...	445,142	445,142	Exports to..... Russia (Odessa).
...		56,044		20,850		90		Imports from...
796,240	796,240	1,952,015	2,008,059	920,780	941,630	1,087,577	1,087,667	Exports to..... Siberia and Russia viâ Kiakhta.
93,913		125,035		85,580		136,510		Imports from...
7,834	101,747	8,227	133,262	8,087	93,667	19,335	155,845	Exports to..... Ainoor Provinces.
2,614,007		2,189,703		1,433,093		2,109,202		Imports from...
937,482	3,551,489	1,308,665	3,498,368	2,781,031	4,214,124	1,316,250	3,425,452	Exports to..... Japan.
315,458		200,711		256,956		224,811		Imports from...
183,404	498,862	203,046	403,757	212,809	469,765	192,959	417,770	Exports to..... Philippine Islands.
383,710		396,046		266,463		210,475		Imports from...
46,274	429,984	96,080	492,126	82,413	348,876	148,427	358,902	Exports to..... Cochin China.
691,251		479,664		340,442		247,411		Imports from...
77,673	768,924	186,615	666,279	102,283	442,725	116,845	364,256	Exports to..... Siam.
264,887		13,545		29,024		153,622		Imports from...
228,028	492,915	...	13,545	235,886	264,910	240,898	394,520	Exports to..... Java.
...		...		...		...		Imports from...
...	...	285	285	15,535	15,535	25,754	25,754	Exports to..... Suez.
73,318,634		76,469,713		73,154,743		80,414,709		Total Imports.
2,197,421		1,546,512		2,154,465		2,224,616		Less Re-exports to Foreign Countries.
71,121,213		74,923,201		71,000,278		78,190,093		Net Imports,...
69,114,733	140,235,946	67,143,988	142,067,189	61,990,235	132,990,513	74,860,550	153,050,643	Exports,..... TOTAL.

* In addition to the Imports entered at the Treaty Ports, to which the Values given in the above Table are of course confined, the South of China is largely supplied with Opium and other articles imported from Hongkong in Native vessels. For further information about the trade with Hongkong, see Note on p. 18; and about Opium, see Note at foot of p. 13.

IMPORTS OF FOREIGN GOODS, 1870 AND 1871.

Description of Goods.	Classifier of Quantity.	1870.		1871.	
		Quantity.	Value.	Quantity.	Value.
Opium :—					
Malwa,	*Peculs*	34,691 36	17,340,729	35,221 26	17,949,234
Patna,	„	13,413 96	5,522,926	15,416 29	7,294,382
Benares,	„	8,143 49	3,338,693	7,608 42	3,452,378
Other kinds,	„	1,601 75	679,701	1,284 40	565,519
Opium, Total,		57,850 56	26,882,049	59,530 37	29,261,513
Cotton Goods :—					
Shirtings, Grey, Plain,	*Pieces*	4,465,937	9,049,138	7,824,885	15,630,300
„ White „	„	737,717	1,677,630	614,735	1,394,785
„ „ Figured, Brocaded, Spotted, &c.,	„	10,455	25,478	38,706	89,332
„ Dyed, Plain,	„	56,534	136,876	50,288	128,299
„ „ Figured, Brocaded, Spotted, &c.,	„	77,833	235,423	106,607	325,315
T-Cloths,	„	3,035,881	4,635,343	4,167,103	6,306,272
Drills, English, Dutch, American,	„	683,503	2,086,784	764,812	2,288,080
Sheetings,	„	3,385	11,999	56,554	214,906
Jeans and Twills,	„	229,993	550,517	189,097	436,662
Chintzes, Furnitures and Cotton Prints,	„	389,237	582,757	76,059	159,070
Turkey Red Cloths, and Cambrics,	„	96,757	218,718	12,874	206,036
Damasks, Dyed,	„	4,417	17,791	20,009	114,451
Velvets, Velveteens, and Fustians,	„	81,515	512,542	23,705	131,314
Jacconets, Cambrics, Lawns and Muslins,	„	...	...	20,079	22,596
Domestics, Grey,	„	565	2,260	8,086	33,961
Handkerchiefs,	*Dozens*	132,185	84,157	349,235½	156,946
Cotton Goods, Unclassed,	*Pieces*	83,900	259,015	35,821	74,319
„ Yarn and Thread,	*Peculs*	52,188	2,221,512	69,815 44	2,091,139
Cotton Goods, Total,	*Value*	...	22,307,940	...	29,803,783
Woollen Goods :—					
Alpaca,	*Pieces*	246	1,333	...	...
Blankets,	*Pairs*	28,106	68,143	18,658½	44,815
Bombazettes,	*Pieces*	17,503	114,925	9,543	58,867
Bunting,	„	970	3,935	679	2,179
Camlets, English,	„	95,991	1,068,469	73,475	849,098
„ Dutch,	„	3,741	74,127	3,917	71,009
„ Imitation, Camleteens, Japanese Cords,	„	1,187	9,217	707	6,026
Cloth, Broad, Medium and Habit,	„	45,820	1,371,285	33,125	994,609
Spanish Stripes,	„	71,685	752,551	64,281	693,927
Russian Cloth,	„	10,597	317,870	1,760	52,800
Flannels,	„	5,669	53,104	1,493	19,428
Lastings,	„	52,480	533,645	49,919	507,646
„ Crape,	„	31,345	174,525	...	...
„ Imitation,	„	1,988	12,081	3,258	18,153
Long Ells,	„	203,336	1,026,592	102,119	519,951
Lustres and Orleans, Plain, and Figured, (China Brocades, Corded Lustres, Cotton Cords, Russell Cords, Martaban Crape, Union Crape, Fancy Crape, China Crape, Demi-Mohair, &c., &c., &c.,...)	„	247,071	866,751	197,108	899,889
Woollen Goods, Unclassed,	„	5,938	86,709	959	27,479
Woollen Goods, Total,	*Value*	...	6,535,262	...	4,765,876
Miscellaneous Piece Goods :—					
Woollen and Cotton Mixtures,	*Pieces*	7,980	45,607	6,875	37,018
„ and Silk „	„	...	...	20	214
Linen Goods,	„	2,965	16,572	2,017	9,901
Canvas,	*Bolts*	3,042	21,129	96	3,634
Miscellaneous Piece Goods, Total,	*Value*	...	83,308	...	50,767

IMPORTS OF FOREIGN GOODS, 1870 AND 1871.—*Continued.*

Description of Goods.	Classifier of Quantity.	1870. Quantity.	1870. Value.	1871. Quantity.	1871. Value.
METALS:—					
Copper, Bar and Rod,	*Peculs*	15,277 26	233,072	9,325 17	140,343
„ Sheet and Nails, and Muntz Metal,	„	4,882 71	97,609	2,616 28	51,139
„ Old,	„	526 45	6,448	842 83	10,495
„ Wire,	„	...	..	47 42	853
„ Manufactured and Ware, Unclassed,	„	310 68	6,181	986 35	14,877
Iron, Nail Rod,	„	247,506 53	510,614	131,598 99	276,289
„ Bar,	„	81,707 52	170,435	40,041 37	82,583
„ Wire,	„	13,062 29	91,859	5,464 18	38,248
„ Pig and Kentledge,	„	...	...	24,723 78	32,050
„ Ware and Manufactured, Unclassed,..	„	11,745 85	37,309	16,997 41	52,516
„ Unmanufactured, Unclassed,	„	14,686 60	15,290	1,010 30	1,245
Lead, in Pigs,	„	268,296 89	1,294,819	130,432 26	647,225
„ Tea and Sheet,	„	624 44	3,293	449 79	308
Quicksilver,	„	2,561 25	141,361	3,024 34	216,849
Spelter and Zinc,	„	839 58	3,725	66 43	399
Steel,	„	20,236 40	66,466	8,476 29	30,951
Tin, in Slabs,	„	50,702 01	1,243,122	30,700 65	784,895
„ Plates,	„	11,623 61	62,158	2,200 91	12,242
Metals, Manufactured, Unclassed, as Hardware, Brass Ware, Brass Buttons, Steel Ware, Tin Ware, Cutlery,...	*Value*	...	60,839	...	45,040
Metals, Total,.....	*Value*	...	4,044,600	...	2,438,547
SUNDRIES:—					
Sugar, Brown,	*Peculs*	172,547 53	520,266	121,582 39	369,386
„ White,	„	60,318 27	306,983	54,605 08	274,192
Betel Nuts,	„	6,256 13	22,842	8,580 95	23,224
Birds' Nests,	„	532 88	419,030	520 78½	385,125
Bicho de Mar,	„	14,692 14	305,540	11,349 50	249,236
Cloves and Spices,	„	1,259 37	19,559	1,882 57	26,003
Coal,	*Tons*	78,705	629,544	85,555½	852,445
Cotton, Raw,	*Peculs*	225,798 75	3,335,540	341,717 10	3,974,597
Fish, Dry and Salt,	„	24,531 64	159,164	26,020 95	169,689
Flint Stones,	„	40,562 44	27,398	15,033 24	11,880
Ginseng,	„	3,173 39	436,726	2,949 97½	450,187
Grain and Pulse,	„	15,823 01	24,576	78 56	103
Indigo,	„	24,401 95	97,376	21,005 39	104,266
Isinglass,	„	3,160 05	94,977	4,209 49	122,809
Matches,	*Gross*	160,061	105,629	155,157	141,547
Mangrove Bark,	*Peculs*	76,752 41	65,842	38,824 37	30,378
Needles,	*Mille*	463,473	92,537	557,979	104,350
Oil,	*Value*	...	140,441	...	63,629
Paints,	*Peculs*	4,243 37	75,311	2,199 05½	57,503
Pepper, Black and White,	„	25,144 11	210,342	26,692 10	300,796
Rattans,	„	13,683 23	58,899	35,193. 88	141,679
Rice,	„	141,297 58	270,423	248,394 32	405,620
Seaweed, and Agar Agar,	„	236,825 45	641,413	304,075 42	751,938
Sandalwood,	„	55,241 40	383,909	42,718 39	297,563
Sapanwood,	„	147,584 08	421,667	74,926 14	229,838
Wood, other sorts, Unclassed,	*Value*	...	63,018	..	64,803
Shellfish, Awabi, Shrimps, &c.,	*Peculs*	9,964 83	89,862	9,589 91	108,710
Silk, Raw,	„	70 97	6,026	371 39	30,790
„ Manufactured,	*Pieces*	...	...	411	2,806
Tea, Japan,	*Peculs*	7,472 63	25,603	12,933 45	54,456
Timber, of all kinds,	*Value*	...	272,482	...	348,339
Window Glass,	*Boxes*	36,307	85,881	17,516	52,704
Wax, Vegetable and Tallow,	*Peculs*	1,176 91	40,606	754 53	8,826
Sundries, Unenumerated,	*Value*	...	1,697,707	...	1,660,190
Sundries, Total,.....	*Value*	...	11,021,828	...	11,869,607
GRAND TOTAL,.....	*Value*	...	71,000,278	...	78,190,093

EXPORTS OF NATIVE GOODS, 1870 AND 1871.

Description of Goods.	Classifier of Quantity.	1870.		1871.	
		Quantity.	Value.	Quantity.	Value.
Silk, Raw and Thrown,	*Peculs*	45,823 58	21,272,294	55,863 12½	25,174,297
„ Refuse,	„	4,880 41	227,387	7,404 16½	374,065
„ Coarse and Wild,	„	3,344 54	371,452	3,665 03	294,825
„ Cocoons,	„	1,845 51	104,904	1,935 70	109,169
„ Piece Goods,	„	3,732 21	1,877,177	4,489 50	2,352,781
„ Manufactured Goods, Unclassed,	„	326 76	143,414	535 27	195,169
„ Worms' Eggs,	*Value*	...	3,974	...	2,147
Tea, Black,	*Peculs*	1,077,989 84	22,213,190	1,361,482 37¾	30,484,280
„ Green,	„	227,481 22	8,020,536	232,619 91¼	9,082,417
„ Brick,	„	62,895 68	503,867	83,789 79	754,495
„ Dust,	„	3,499 48	27,995	458 27½	4,583
Bags, of all kinds,	*Pieces*	468,770	17,095	252,990	9,287
Bamboo, of all kinds, and Ware,	*Value*	...	48,496	...	46,531
Beans and Peas,	*Peculs*	578,209 25	687,866	169,692 47	170,114
Cassia Lignea,	„	31,594 25	485,758	57,128 23	899,633
Camphor,	„	12,662 56	99,410	8,172 42	50,479
China Ware, Earthen Ware, and Pottery,	„	57,813 79	248,990	54,096 89	319,923
Coal,	„	3,000	270	33	10
Clothing, Chinese, Boots and Shoes,	*Value*	...	105,069	...	116,076
Cotton, Raw,	*Peculs*	22,211 79	333,175	10,764 41	129,350
„ Seed,	„	65	148	...	...
Curios,	*Value*	...	3,911	...	11,559
Dyes, Colours and Paints,	*Peculs*	78 51	600	628 41	9,128
Fans, of all kinds,	*Pieces*	2,338,339	38,329	5,325,671	72,001
Fish, „ „	*Peculs*	1,556 05	12,531	3,861 23	35,627
Fire Crackers,	„	19,047 08	145,722	31,503 69	243,620
Flour,	„	400 79	851	107 61	299
Fruits, of all kinds,	„	41,591 75	72,594	25,513 78	53,614
Fungus,	„	1,857 80	46,402	2,476 03	29,925
Glass Ware, Bangles, &c.,	„	7,158 16	211,213	4,737 76	134,448
Grass Cloth,	„	463 09	25,518	367 70	33,761
Hair, of all kinds,	„	1,163 23	17,541	286 54	8,474
Hemp Rope and Twine,	„	18,575 30	185,447	15,016 98	93,823
Hides, of all kinds,	„	5 74	63	329 02	4,272
Hoofs, „ „	„	216 95	418	278 06	456
Horns, „ „	„	226 89	1,839	47 84	1,449
Indigo,	„	2,025 26	10,110	3,181 85	10,185
Lung-ngans,	„	4,412 22	19,401	3,884 40	23,044
Mats and Matting,	*Pieces*	146,662	329,043	290,946	514,637
Medicine,	*Peculs*	28,135 45	245,541	7,636 07	72,170
Metals, Manufactured, Unclassed, as Knives, Cutlery, Brass Ware, Copper Ware, Iron, Tin, and Pewter Ware,	„	9,058 15	98,323	8,057 18	102,447
Metals, Unmanufactured, Unclassed,	„	...	...	665 80	3,355
Musk,	„	13 98	69,292	10 18½	36,925
Nankeens,	„	727 23	29,407	192 14	7,657
Nut-galls,	„	6,287 45	41,096	9,886 59	60,331
Oil, of all kinds,	„	179,287 63	737,436	14,271 64	57,566
Paper, of all kinds, and Paper Ware, Books, Tin Foil, Brass Foil,	„	28,703 40	235,414	28,513 07	240,626
Preserves,	„	7,006 84	57,605	7,562 08	61,960
Provisions and Vegetables,	„	53,731 34	59,567	53,342 67	80,602
Rattans and Rattan Ware,	„	285 44	2,969	449 17	3,344
Rhubarb,	„	3,565 58	176,723	4,600 51½	179,695
Safflower,	„	644 60	38,676	1,719 29	103,038
Skins, of all kinds,	*Pieces*	8,798	4,674	1,046	2,002
Straw Braid,	*Peculs*	3,124 91	74,940	2,815 47	21,238
Sugar, White,	„	58,803 86	301,691	61,180 88	269,485
„ Brown,	„	305,773 26	747,029	323,131 32	678,412
„ Candy,	„	20,898 21	141,990	28,425 78	174,056
Tobacco,	„	4,353 89	57,365	1,418 33	17,738
Vermicelli and Macaroni,	„	38,856 98	167,889	21,300 23	71,942
Wax,	„	1,869 87	331,646	47 58	3,381
Wool,	„	397 97	2,388	1,138 90	5,910
Sundries, Unenumerated,	*Value*	...	454,574	...	756,717
Total,	*Value*	...	61,990,235	...	74,860,550

RE-EXPORTS OF FOREIGN GOODS, 1870 AND 1871.

Description of Goods.	Classifier of Quantity.	1870.		1871.	
		Quantity.	Value.	Quantity.	Value.
Opium :—					
Malwa,	*Peculs*	33	16,440	13 39	6,918
Patna,	„	265 20	110,888	403 20	200,043
Benares,	„	1 20	480	4 80	2,356
Other kinds,	„	43 50	19,866	156 51	66,887
Opium, Total,		342 90	147,674	577 90	276,204
Cotton Goods :—					
Shirtings, Grey, Plain,	*Pieces*	123,443	246,917	252,981	506,025
„ White, „	„	14,466	33,380	10,019	22,056
„ „ Figured, Brocaded, Spotted, &c.,	„	1,397	3,213	549	1,263
„ Dyed, Plain,	„	12,139	29,133	7,969	20,017
„ „ Figured, Brocaded, Spotted, &c.,	„	3,599	10,771	4,643	13,861
T-Cloths,	„	136,677	210,763	15,960	24,285
Drills, English, Dutch, American,	„	9,071	27,241	14,033	40,938
Sheetings,	„	3,800	11,400	...	...
Jeans and Twills,	„	6,503	15,713	725	1,715
Chintzes, Furnitures and Cotton Prints,	„	35,627	53,485	24,451	34,198
Turkey Red Cloths and Cambrics,	„	20,532	46,197	7,139	15,614
Damasks, Dyed,	„	263	1,369	4	21
Velvets, Velveteens, and Fustians,	„	21,913	109,561	10,068	50,254
Jaconets, Cambrics, Lawns and Muslins,	„	23,349	18,919	14,611	15,032
Handkerchiefs,	*Dozens*	20,485	11,277	5,970	3,582
Cotton Goods, Unclassed,	*Pieces*	4,401	10,433	3,318	8,099
„ Yarn and Thread,	*Peculs*	1,448 20	46,746	284 77	8,996
Cotton Goods, Total,	*Value*	...	886,518	...	765,956
Woollen Goods :—					
Alpaca,	*Pieces*	403	2,015	1,700	8,500
Blankets,	*Pairs*	20,149	60,320	9,908	29,724
Bombazettes,	*Pieces*	240	1,630	770	5,382
Bunting,	„	187	1,179	150	600
Camlets, English,	„	10,546	116,416	2,240	25,208
„ Dutch,	„	40	780	...	...
„ Imitation, Camleteens, Japanese Cords,	„	442	3,536	...	...
Cloth, Broad, Medium and Habit,	„	875	26,373	1,529	45,915
Spanish Stripes,	„	3,747	39,009	1,886	19,040
Russian Cloth,	„	708	21,240	190	5,700
Flannels,	„	181	1,629	84	1,008
Lastings,	„	3,726	37,260	1,831	18,313
„ Crape,	„	1,880	10,540	970	5,141
Long Ells,	„	8,351	41,775	10,870	54,350
Lustres and Orleans, Plain and Figured, (China Brocades, Corded Lustres, Cotton Cords, Russell Cords, Martaban Crape, Union Crape, Fancy Crape, China Crape, Demi-Mohair, &c., &c., &c.,...)	„	25,234	88,326	31,066	108,731
Woollen Goods, Unclassed,	„	780	8,168	1,390	16,719
Woollen Goods, Total,	*Value*	...	460,196	...	344,331
Miscellaneous Piece Goods :—					
Woollen and Cotton Mixtures,	*Pieces*	419	2,913	497	2,705
Linen Goods,	„	344	2,710	421	3,389
Canvas,	*Bolts*	628	3,782	1,871	10,092
Miscellaneous Piece Goods, Total,	*Value*	...	9,405	...	16,168

RE-EXPORTS OF FOREIGN GOODS, 1870 AND 1871.—*Continued.*

Description of Goods.	Classifier of Quantity.	1870. Quantity.	1870. Value.	1871. Quantity.	1871. Value.
METALS:—					
Copper, Bar and Rod,	*Peculs*	1,085 67	16,944	4,638 97	69,641
„ Sheet and Nails, and Muntz Metal,	„	1,027 12	20,677	791 07	15,796
„ Ore and Unmanufactured,	„	...	...	6 30	100
„ Wire,	„	...	...	4 50	81
„ Manufactured & Ware, Unclassed,	„	16 42	256	...	...
Iron, Nail Rod,	„	12,447 20	24,991	2,552 39	5,108
„ Bar,	„			3,386 93	6,773
„ Wire,	„	495 93	3,048	58 80	412
„ Pig and Kentledge,	„	...	...	1,658 50	2,156
„ Ware and Manufactured, Unclassed,	„	7,048 67	21,457	5,836 16	17,768
„ Unmanufactured, Unclassed,	„	644	644	550 40	554
Lead, in Pigs,	„	2,480 19	9,959	884 52	3,895
„ Tea and Sheet,	„	374 21	1,871	466	2,714
Quicksilver,	„	691 86	40,818	763 79	53,465
Spelter and Zinc,	„	468 69	1,885	0 84	4
Steel,	„	159 32	649	418 55	1,339
Tin, in Slabs,	„	39 82	1,035	76 43	2,103
„ Plates,	„	1,594 06	7,972	728 28	3,810
Metals, Manufactured, Unclassed, as Hardware, Brass Ware, Brass Buttons, Steel Ware, Tin Ware, Cutlery,	*Value*	...	3,368	...	6,890
Metals, Total,	*Value*	...	155,574	...	192,609
SUNDRIES:—					
Sugar, Brown,	*Peculs*	580 90	1,742	2,214 95	6,645
„ White,	„	1,775 86	10,451	1,740 90	9,310
Betel Nuts,	„	10 75	24	329 20	981
Birds' Nests,	„	4 26	1,045	12 22	8,936
Bicho de Mar,	„	120 44	4,156	47 70	1,547
Cloves and Spices,	„	...	...	0 70	98
Coal,	*Tons*	714	5,092	2,356	21,479
Cotton, Raw,	*Peculs*	391 60	6,241	939 26	11,703
Fish, Dry and Salt,	„	915 27	13,070	1,306 78	15,413
Flint Stones,	„	3 55	52	2 54 0	20
Ginseng,	„	94 53	12,671	53 55	8,959
Indigo,	„	41 30	109	2 70	14
Isinglass,	„	46 50	1,395	106 70	3,201
Matches,	*Gross*	1,298	451	3,522	3,481
Mangrove Bark,	*Peculs*	90	90	300	210
Needles,	*Mille*	1,240	234	40	8
Oil,	*Value*	...	23,216	...	44,426
Paint,	*Peculs*	1,299 15	13,615	741 02	6,875
Rattans,	„	11 60	30	589	1,767
Seaweed and Agar Agar,	„	76	228	323 80	929
Sandalwood,	„	17 40	123	210 19	1,471
Sapanwood,	„	836	2,508	1,679 07	5,039
Wood, other sorts, Unclassed,	*Value*	...	4,415	...	2,043
Shellfish, Awabi, Shrimps, &c.,	*Peculs*	728 40	20,885	1,020 14	25,066
Silk, Raw,	„	431 90	136,016	605 39	192,612
„ Manufactured,	*Pieces*	250	2,009	...	...
Tea, Japan,	*Peculs*	8,905 24	106,818	4,175 94	58,445
Timber, of all kinds,	*Value*	...	5,500	...	2,036
Window Glass,	*Boxes*	549	1,098	1,635	4,905
Wax, Vegetable or Tallow,	*Peculs*	427 10	4,623	209 88	3,366
Sundries, Unenumerated,	*Value*	...	217,200	...	188,345
Sundries, Total,	*Value*	...	495,098	...	629,330
GRAND TOTAL,	*Value*	...	2,154,465	...	2,224,616

OPIUM,—NET IMPORTATION INTO EACH PORT, 1864 TO 1871.

PORT.	1864. Total Import.	1865. Total Import.	1866. Total Import.	1867. Total Import.	1868. Total Import.	1869. Total Import.	1870. Total Import.	1871. Malwa.	1871. Patna.	1871. Benares	1871. Sorts.	1871. Total.
	Peculs.	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*
Shanghai, Imported and stored on board Receiving vessels,..	30,521	36,042	40,384	41,629	37,601	39,669	43,138	29,119	9,810	2,582	473	41,984
Shanghai, Re-exported from Receiving vessels to other Chinese ports,..	13,314	22,906	30,021	29,401	26,732	27,518	31,144	27,585	1,697	365	357	30,004
Shanghai, Landed for local consumption,..	19,709	14,603	11,755	11,962	10,779	11,299	11,700	1,179	8,052	2,464	2	11,697
Newchwang,..	504	1,515	2,660	2,585	2,685	2,519	2,445	2,193	53	33	...	2,289
Tientsin,..	2,875	5,561	9,161	7,898	7,423	5,288	7,161	6,329	232	220	310	7,091
Chefoo,..	1,314	2,644	3,794	2,735	3,077	3,076	3,914	3,074	59	70	...	3,203
Hankow,..	1,999	3,352	4,112	4,242	2,871	2,608	3,678	2,988	135	2	19	3,144
Kiukiang,..	2,202	2,241	2,260	2,202	1,923	1,905	2,110	2,048	8	...	8	2,064
Chinkiang,..	1,693	4,886	5,026	4,826	4,862	5,568	6,943	6,422	524	32	8	6,986
Ningpo,..	3,305	3,192	4,321	5,047	4,505	4,713	5,024	5,034	352	39	...	5,425
Foochow,..	6,246	5,518	5,927	5,503	4,963	4,897	4,256	1,696	1,318	258	257	3,529
Tamsui,..	997	2,288	1,111	1,055	931	1,039	1,163	...	55	1,235	16	1,306
Takow,..			1,431	1,531	1,102	1,532	1,731	2	232	1,340	400	1,974
Amoy,..	4,037	3,835	4,009	3,735	3,716	3,721	3,098	...	1,589	1,171	296	3,056
Swatow,..	4,712	4,121	5,461	5,516	4,272	4,238	4,840	3,211	2,470	1,159	...	6,840
Canton,..	2,490	2,377	3,488	2,111	806	1,100	754	874	202	...	...	1,076
TOTAL,..	52,083	56,133	64,516	60,948	53,915	53,413	58,817	35,050	15,281	8,023	1,316	59,670

The Sorts imported, and the estimated Values, are shown in the Table below. All the Opium imported into China reaches it through Hongkong. As the quantity consumed there is comparatively trifling, the amount brought into China in Native vessels, and which consequently does not appear in these Returns, must be nearly equal to the quantity by which the Hongkong importation exceeds the entries at the Treaty Ports. A deduction must be made from this, for the amount sent to California for the use of the Chinese there. This has been for the last five years as follows:—

1867,..	*Boxes* 873,	$ 370,402,	say *Tls*	278,202.
1868,..	„ 449,	„ 188,750,	„ „	141,563.
1869,..	„ 343,	„ 138,453,	„ „	103,840.
1870,..	„ 272,	„ 102,970,	„ „	77,228.
1871,..	„ 1,409,	„ 596,190,	„ „	447,143.

The total importation into Hongkong, its excess over the entries at the Treaty Ports, and the estimated value of each, are shown in the following Table.

YEAR.	IMPORTED IN FOREIGN VESSELS INTO CHINESE PORTS. Malwa.	Patna.	Benares.	Sorts.	Total.	Value.	HONGKONG. Total Import.	Value.	Excess.	Value.
	Peculs.	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Tls*	*Peculs.*	*Tls*	*Peculs.*	*Tls*
1864,..	29,998	16,412	5,063	610	52,083	20,233,200	...	...	...	...
1865,..	27,488	17,823	9,601	1,221	56,133	25,821,180	76,523	34,996,680	20,390	9,175,500
1866,..	35,385	19,076	9,172	883	64,516	34,838,640	81,350	42,582,240	16,834	7,743,600
1867,..	34,006	14,809	11,488	645	60,948	31,994,576	86,530	44,018,076	25,582	12,023,500
1868,..	31,234	12,315	9,179	1,187	53,915	26,127,869	69,537	33,157,769	15,622	7,029,900
1869,..	29,284	13,990	8,771	1,368	53,413	26,329,953	86,065	42,427,794	32,652	16,097,841
1870,..	34,045	14,443	8,671	1,658	58,817	27,713,588	95,045	44,764,928	36,228	17,051,340
1871,..	35,050	15,281	8,023	1,316	59,670	28,910,925	89,744	45,166,981	30,074	16,256,056

TEA,—PARTICULARS

DESTINATION.	BLACK.									LEAF.	DUST.	BR
	CONGOU.	OOLONG.	SOU-CHONG.	POU-CHONG.	FLOWERY PEKOE.	ORANGE PEKOE.	SCENTED CAPER.	MIXED.	TOTAL.			
	Peculs.	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Pe*
Great Britain, ...	865,161	8,818	26,430	42	3,133	32,990	39,758	368	976,700	139	456	
Hongkong, ...	10,928	36,643	8,219	4,404	1,145	8,652	6,279	829	77,099	7	...	
India, ...	499	...	...	44	...	...	...	...	543	...	...	
Singapore and Straits, ...	372	1,782	16	...	...	...	...	...	2,170	...	...	
Australia, ...	90,657	15	239	...	...	933	69	78	91,991	...	...	
New Zealand, ...	5,511	...	...	...	...	42	...	...	5,553	...	...	
South Africa, ...	94	...	1,033	...	...	...	...	282	1,409	...	...	
Canada, ...	26	...	...	...	...	...	...	...	26	...	...	
British Channel for orders,	15,157	11	1,908	...	230	1	1	...	17,308	...	...	
Continent of Europe, ...	2,121	50	...	...	...	...	...	...	2,171	...	...	
U. S. of America, ...	25,833	104,635	14,548	1,563	65	140	8	238	147,030	...	...	
Buenos Ayres, ...	...	...	...	...	...	825	...	...	825	...	...	
Peru, ...	...	4	50	...	...	...	...	...	54	...	...	
Russia (Odessa), ...	14,880	...	...	...	...	...	...	...	14,880	...	...	
Siberia&Russia viâKiakhta,*	16,818	...	...	...	...	...	...	...	16,818	...	...	83,
Amoor Provinces, ...	382	...	...	...	...	...	...	...	382	...	...	
Japan, ...	206	...	...	...	...	...	...	...	206	...	...	
Philippine Islands, ...	127	12	5	...	...	...	...	...	144	...	...	
Cochin China, ...	324	2,596	6	54	...	...	...	...	2,980	...	...	
Siam, ...	219	373	2	...	...	...	...	...	594	...	...	
Java, ...	1,192	2,349	39	171	...	...	...	...	3,751	...	...	
TOTAL, ...	1,050,507	157,288	52,495	6,278	4,573	43,583	46,115	1,795	1,362,634	146	456	83,

* Besides the Leaf and Brick Teas forwarded viâ Tientsin and Kiakhta to Siberia and Russia, considerable quantities are sent Hankow and vicinity up the Han (漢) river to Fan-chêng (樊城), where overland carriage is resorted to. No figures are available for the previous to 1871. During that year the following quantities were thus forwarded to Siberia and Mongolia:—

Leaf Tea, ...	*Peculs*	91,121.88	*Value, Tls* 2,095,803
Brick „	„	111,062.69	„ „ 333,188

EXPORT FOR 1871.

GREEN.							GRAND TOTAL.	JAPAN.			DESTINATION.
Young Hyson.	Hyson.	Hyson Skin.	Twankay.	Imperial.	Gunpowder.	Total.		Uncolored.	Colored	Total.	
Peculs.	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	
20,136	5,714	206	1,148	5,572	31,797	64,573	1,041,868	1,357	1,286	2,643	Great Britain.
1,859	1,440	...	165	1,224	1,950	6,638	83,744	49	...	49	Hongkong.
65	3,834	...	...	...	11	3,910	4,453	...	...	...	India.
...	2	...	...	...	...	2	2,172	...	...	...	Singapore and Straits.
...	...	...	...	...	28	28	92,019	...	...	...	Australia.
...	...	...	...	...	11	11	5,564	...	...	...	New Zealand.
...	...	...	...	...	...	...	1,409	...	...	...	South Africa.
3,050	287	...	378	308	992	5,015	5,041	...	529	529	Canada.
...	...	...	...	...	...	...	17,308	...	...	...	British Channel for orders.
...	...	...	...	631	16	647	2,818	2	...	2	Continent of Europe.
78,664	9,131	45	5,040	20,689	37,950	151,519	298,549	350	601	951	U. S. of America.
...	...	...	...	113	112	225	1,050	...	...	...	Buenos Ayres.
...	...	...	...	...	...	...	54	...	...	...	Peru.
...	...	...	...	...	...	...	14,880	...	...	...	Russia (Odessa).
...	...	...	...	...	...	...	100,221	...	...	...	Siberia & Russia viâ Kiakhta.
...	...	...	...	...	...	...	674	...	...	...	Amoor Provinces.
2	43	...	1	1	2	49	350	...	...	...	Japan.
...	...	...	...	...	...	...	144	...	...	...	Philippine Islands.
...	...	...	...	...	...	...	2,980	...	...	...	Cochin China.
...	...	...	...	...	...	...	594	...	...	...	Siam.
...	...	...	...	...	...	...	3,751	...	...	...	Java.
103,776	20,451	251	6,732	28,538	72,869	232,617	*1,679,643	1,758	2,416	4,174	.....Total.

* The Total Export of Tea to Foreign Countries for the past six years is shown in the following Table.

Year.	Black.	Green.	Leaf.	Dust.	Brick.	Total.
	Peculs.	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*	*Peculs.*
1866,.....	961,617	189,790	1	22,226	18,504	1,192,138
1867,.....	1,042,229	223,434	8	26	65,277	1,330,974
1868,.....	1,191,497	220,002	854	9,734	53,123	1,475,210
1869,.....	1,214,631	230,945	679	8,373	73,521	1,528,149
1870,.....	1,087,121	227,481	1	3,499	62,896	1,380,998
1871,.....	1,362,634	232,617	146	456	83,790	1,679,643

SHIPPING, 1866 TO 1871.

FLAG.	1866.		1867.		1868.		1869.		1870.		1871.	
	Vessels entered and cleared.		Vessels entered and cleared.		Vessels entered and cleared.		Vessels entered and cleared.		Vessels entered and cleared.		Vessels entered and cleared.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
American,	3,602	1,957,687	2,926	1,673,754	3,623	2,237,327	4,165	2,746,515	4,547	3,004,746	4,600	3,187,643
Argentine Republic,	...	...	...	...	...	...	2	980	...	...	...	...
Austrian,	10	2,844	8	2,920	...	...	...	...	...	...	...	...
Belgian,	2	622	2	1,600	2	1,206	...	...	16	3,594	...	...
British,	8,276	3,921,851	7,964	3,711,080	7,165	3,332,092	6,727	3,052,320	6,577	3,125,590	7,160	3,330,881
Chinese,*	516	33,724	561	34,600	571	32,732	482	29,636	469	29,939	474	30,013
Danish,	216	37,058	139	25,870	135	23,737	231	46,157	333	76,866	273	59,371
Dutch,	194	69,883	252	82,628	124	35,106	184	50,954	276	81,547	203	59,791
French,	234	108,918	217	112,587	249	139,165	218	109,173	194	79,824	277	135,829
German,	2,248	620,322	2,232	611,841	1,772	467,087	2,387	666,266	1,304	370,607	1,480	428,747
Hawaiian,	19	3,920	8	1,200	12	1,920	12	1,800	10	1,500	12	1,800
Italian,	5	3,997	13	11,595	4	1,642	...	...	...	...	...	...
Japanese,	4	1,966	1	809	12	4,168	2	476	...	...	...	...
Peruvian,	...	...	...	...	...	...	14	1,400	4	440	11	440
Portuguese,	30	5,679	6	400	...	...	10	1,730	5	702	...	...
Russian,	19	4,172	54	8,987	32	12,099	27	10,919	23	7,990	88	34,340
San Salvador,	...	...	2	986	2	1,600	5	4,738	1	1,626	2	2,908
Siamese,	157	67,662	166	71,924	222	91,312	202	86,132	141	63,705	115	45,456
Spanish,	18	23,350	71	21,863	44	11,147	34	10,120	41	9,926	50	18,454
Swedish & Norwegian,	62	13,927	82	22,171	106	26,163	100	23,746	195	49,226	218	45,884
TOTAL,	15,612	6,877,582	14,704	6,396,815	14,075	6,418,503	14,802	6,843,072	14,136	6,907,828	14,963	7,381,557

* Vessels built and owned by Chinese, but sailing under Special Licenses issued by the Superintendents of Customs at Shanghai and Ningpo.

The Shipping for the last four years has been divided between Steamers and Sailing Vessels in the following proportions, nearly:—

YEAR.	Steamers entered and cleared.		Sailing Vessels entered and cleared.		Total entered and cleared.	
	No.	Tons.	No.	Tons.	No.	Tons.
1868,	7,158	...	6,917	...	14,075	...
1869,	7,215	...	7,587	...	14,802	...
1870,	7,724	5,058,528	6,412	1,849,300	14,136	6,907,828
1871,	8,218	5,637,415	6,745	1,744,142	14,963	7,381,557

REVENUE OF EACH PORT, 1871.

PORT.	IMPORT DUTIES.	EXPORT DUTIES.	COAST TRADE DUTIES.	TONNAGE DUES.	TRANSIT DUES.	TOTAL.
	Hk. Tls m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.
Newchwang,	83,740.9.3.0	84,153.7.3.0	13,913.9.2.8	4,134.4.0.0	...	185,942.9.8.8
Tientsin,	310,051.8.3.2	40,976.7.3.6	83,967.3.3.5	6,166.4.0.0	...	441,162.3.0.3
Chefoo,	146,923.2.5.9	93,157.0.6.3	40,735.0.6.0	10,191.7.0.0	...	291,007.0.8.2
Hankow,	7,223.0.1.9	1,423,480.8.2.1	67,341.8.1.0	5,376.2.0.0	74,418.9.1.0	1,577,840.7.6.0
Kiukiang,	359.9.4.7	518,021.8.7.2	9,959.3.4.0	4,156.0.0.0	4,575.3.9.2	537,072.5.5.1
Chinkiang,	3,044.3.2.5	44,209.3.4.1	15,471.4.5.8	4,074.1.0.0	75,566.5.9.3	142,365.8.1.7
Shanghai,	2,121,297.4.6.0	765,115.8.5.7	209,184.2.9.1	92,755.9.0.2	23,683.3.0.1	3,212,036.8.1.1
Ningpo,	195,818.3.2.3	463,036.3.7.3	33,083.2.4.3	3,329.8.6.7	23,086.9.3.5	718,354.7.4.1
Foochow,	168,073.7.0.6	1,634,837.9.3.2	10,326.9.0.0	16,042.2.0.0	6,080.0.6.9	1,835,360.8.0.7
Tamsui,	32,276.6.5.1	65,488.8.9.1	449.9.1.4	1,895.2.3.6	2,306.8.3.9	102,417.5.3.1
Takow,	30,543.2.0.1	81,721.9.8.9	1,921.7.8.3	3,110.9.0.0	...	117,297.8.7.3
Amoy,	223,007.3.2.7	262,933.4.4.5	20,869.8.2.0	17,449.9.0.0	...	524,260.4.9.2
Swatow,	281,510.7.1.4	185,555.7.0.7	33,654.9.2.6	16,813.2.0.0	...	517,534.5.4.7
Canton,	244,118.8.4.9	721,893.3.4.2	28,178.1.1.2	19,301.6.8.0	...	1,013,491.9.8.3
TOTAL, 1871,	3,847,989.5.4.3	6,384,583.0.9.9	569,057.9.2.0	204,797.6.8.5	209,718.0.3.9	11,216,146.2.8.6

TOTAL ANNUAL REVENUE OF EACH PORT, 1864 TO 1870.

PORT.	1864.	1865.	1866.	1867.	1868.	1869.	1870.
	Hk. Tls m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.	*Hk. Tls* m.c.c.
Newchwang,	104,729.5.1.1	167,064.2.4.8	185,134.1.5.7	231,972.4.1.7	215,849.2.2.4	260,981.9.6.2	238,415.1.3.4
Tientsin,	210,849.6.2.5	358,023.1.6.0	541,335.6.3.7	411,297.8.2.9	390,605.2.8.4	394,857.1.7.8	399,006.5.6.9
Chefoo,	228,920.6.7.0	243,514.1.8.2	322,974.0.8.9	238,911.1.1.0	284,363.2.1.6	287,856.7.2.6	306,383.1.0.4
Hankow,	999,166.0.3.3	926,396.8.5.0	1,052,367.6.7.5	999,904.7.0.7	1,252,670.7.5.5	1,328,951.3.8.6	1,263,298.8.1.8
Kiukiang,	425,947.5.6.5	566,982.7.1.2	509,161.9.0.7	426,601.3.6.5	547,370.8.5.3	499,065.8.9.6	468,225.7.4.4
Chinkiang,	30,071.3.9.6	20,279.3.8.9	15,657.5.3.8	23,967.3.6.3	36,478.6.9.8	54,655.2.5.0	71,362.0.2.7
Shanghai,	2,081,373.6.3.1	2,167,841.1.6.3	2,162,495.8.4.0	2,310,888.7.3.8	2,508.164.6.5.1	2,667,904.8.0.6	2,730,955.6.9.7
Ningpo,	498,491.4.3.8	440,773.8.2.6	488,828.2.9.5	532,369.4.2.6	599,697.7.0.1	690,353.0.7.8	689,409.6.0.8
Foochow,	1,605,294.6.6.3	1,642,200.2.4.0	1,543,350.7.3.5	1,712.429.9.7.4	1,819,100.3.7.7	1,776,303.6.7.2	1,490,724.9.3.0
Tamsui,	83,579.1.3.8*	39,281.4.5.1	54,822.9.6.6	49,037.1.4.7	69,347.4.5.9	67,343.7.1.7	66,444.8.8.8
Takow,	47,851.3.9.3	54,988.6.2.9	51,364.2.8.0	68,471.1.8.8	51,486.9.5.6	72,700.9.4.3	112,525.4.4.1
Amoy,	474,909.4.0.4	471,978.2.9.6	533,149.4.0.8	503,327.8.0.1	426,044.7.8.8	556,404.1.1.2	498,675.0.2.8
Swatow,	355,183.2.2.6	346,064.1.6.2	431,750.6.7.7	420,863.1.4.5	381,025.0.6.2	351,510.2.9.3	386,484,1.2.8
Canton,	727,889.7.4.2	843,892.4.0.0	889,479.1.0.5	934,774.6.7.7	866,269.2.8.1	869,958.5.3.2	822,066.1.1.0
TOTAL,	7,874,257.4.3.5	8,289,280.7.0.8	8,781,872.3.0.9	8,864.816.8.8.7	9,448.474.3.0.5	9,878,847.5.5.1	9,543.977.2.2.6

* From the opening of the Port, in September 1863, to the end of 1864.

VALUE OF THE DIRECT FOREIGN TRADE OF EACH PORT, 1870 AND 1871.

PORT.	1870.			1871.		
	IMPORTS.	EXPORTS.	TOTAL.	IMPORTS.	EXPORTS.	TOTAL.
	Taels.	*Taels.*	*Taels.*	*Taels.*	*Taels.*	*Taels.*
Newchwang,	246,301	786,478	1,032,779	209,866	149,006	358,872
Tientsin,	1,078,237	943,381	2,021,618	1,344,708	1,118,767	2,463,475
Chefoo,	863,761	458,608	1,322,369	822,737	154,942	977,679
Hankow,	...	2,290,335	2,290,335	126,029	3,549,380	3,675,409
Kiukiang,	...	...	...	...	81,997	81,997
Chinkiang,	...	...	...	...	...	...
Shanghai,	51,640,005	34,326,410	85,966,415	56,967,794	40,146,448	97,144,242
Ningpo,	853,809	152,684	1,006,493	646,197	8,849	655,046
Foochow,	3,053,913	8,478,338	11,532,251	2,977,282	12,109,913	15,087,195
Tamsui,	186,028	68,496	254,524	430,217	69,590	499,807
Takow,	82,358	509,798	592,156	402,218	490,138	892,356
Amoy,	4,689,006	1,846,746	6,535,752	4,289,283	2,708,106	6,997,389
Swatow,	4,103,129	370,583	4,473,712	5,584,566	429,954	6,014,520
Canton,	6,358,196	11,758,378	18,116,574	6,613,812	13,843,460	20,457,272
TOTAL,	73,154,743	61,990,235	135,144,978	80,414,709	74,860,550	155,275,259
Re-exports abroad from Shanghai, (chiefly to Japan,)	1,889,015			1,921,217		
Re-exports abroad from all the other Ports,	265,450			303,399		
Total Re-exports,	2,154,465		2,154,465	2,224,616		2,224,616
NET TOTAL,	71,000,278	61,990,235	132,990,513	78,190,093	74,860,550	153,050,643

Note.—The Values of the Trade with Hongkong included in the above Table, and given in the Table on pp. 6–7, represent only that portion of the Trade of China *with Foreign Countries*, which passes through Hongkong;—with this exception, that the *Opium* imported into Shanghai is carried to the credit of India. The *whole* Trade carried on by Foreign vessels between Hongkong and the Treaty Ports (with the exception just mentioned,) is given below.

YEAR.	IMPORTS OF		Total Imports.	EXPORTS OF NATIVE GOODS FOR		Total Exports.	GRAND TOTAL.
	Foreign Goods.	Native Goods.		Foreign Countries.	Chinese Ports.		
1870,	21,375,847	2,703,351	24,079,198	11,391,560	2,030,204	13,421,764	37,500,962
1871,	25,376,627	3,392,159	28,768,786	12,505,499	2,339,093	14,844,592	43,613,378

RE-EXPORTS OF FOREIGN GOODS TO FOREIGN COUNTRIES.

COUNTRY.	1870.	1871.	COUNTRY.	1870.	1871.
	Tls	*Tls*		*Tls*	*Tls*
Great Britain,	67,697	107,864	Siam,	1,004	...
Continent of Europe,	133	6,937	Singapore,	2,592	6,183
U. S. of America,	46,654	24,083	Java,	...	26
Canada,	7,303	7,398			
Amoor Provinces,	8,204	7,039	To Foreign Countries direct,	1,408,016	1,389,680
Japan,	1,263,463	1,222,547	„ Hongkong,	746,449	834,936
Philippine Islands,	10,857	7,445			
Cochin China,	109	158	TOTAL,	2,154,465	2,224,616

ANNUAL VALUE OF THE WHOLE TRADE OF EACH PORT,

CARRIED ON IN FOREIGN VESSELS, 1868 TO 1871.

‡ Besides the Home Trade here given, a still greater amount of carrying trade is done by Foreign vessels in distributing the Foreign Imports from Shanghai to Hankow, Kiukiang, Chinkiang, Tientsin, Chefoo, Newchwang, and Ningpo, and in bringing teas from Hankow, Kiukiang, and Ningpo, to Shanghai for re-exportation abroad.

PORT.	1868.		1869.		1870.		1871.	
	Taels.	*Total of each Port. Taels.*	*Taels.*	*Total of each Port. Taels.*	*Taels.*	*Total of each Port. Taels.*	*Taels.*	*Total of each Port. Taels.*
NEWCHWANG, Net Foreign Imports,	2,784,887		2,393,830		2,242,229		1,945,606	
Net Native „	2,130,951		1,185,980		684,925		746,241	
Exports,	1,591,619		2,240,439		2,250,998		1,452,309	
		6,507,457		5,820,249		5,178,152		4,144,156
TIENTSIN, Net Foreign Imports,	11,651,871		11,166,444		11,935,176		12,218,543	
Net Native „	4,790,267		5,961,166		4,252,238		5,391,997	
Exports,	944,751		962,965		733,577		947,142	
		17,386,889		18,090,575		16,920,991		18,557,682
CHEFOO, Net Foreign Imports,	4,662,641		4,671,526		4,532,115		4,303,898	
Net Native „	2,352,454		1,877,945		1,191,392		2,212,688	
Exports,	1,523,611		1,885,536		2,278,925		2,310,673	
		8,538,706		8,435,007		8,002,432		8,827,259
HANKOW, Net Foreign Imports,	9,852,797		10,088,356		12,065,161		12,044,734	
Net Native „	5,135,817		6,184,867		7,258,164		9,640,094	
Exports,	15,481,567		14,776,451		14,442,924		17,839,377	
		30,470,181		31,049,674		33,766,249		39,524,205
KIUKIANG, Net Foreign Imports,	2,869,545		2,655,606		2,844,028		2,567,449	
Net Native „	594,314		501,407		452,335		362,940	
Exports,	7,683,993		6,546,886		6,130,323		6,870,311	
		11,147,852		9,703,899		9,426,686		9,800,700
CHINKIANG, Net Foreign Imports,	3,656,863		5,269,212		6,844,866		7,613,939	
Net Native „	2,037,117		2,309,991		2,103,000		2,308,599	
Exports,	441,919		332,913		322,761		785,661	
		6,135,899		7,912,116		9,270,627		10,708,199
SHANGHAI,* Net Foreign Imports,	12,454,880		16,220,678		11,928,889		14,755,816	
Net Native „	6,657,875		6,795,810		4,511,217		7,300,065	
Exports,	27,710,516		20,083,327		23,000,686		29,390,540	
		46,823,271		43,099,815		39,440,792		51,446,421
NINGPO, Net Foreign Imports,	4,720,063		4,965,140		5,618,493		5,190,789	
Net Native „	1,808,661		2,051,169		1,698,964		1,847,821	
Exports,	6,070,721		7,267,416		7,296,576		8,976,484	
		12,599,445		14,283,725		14,614,033		16,015,094
FOOCHOW, Net Foreign Imports,	3,902,691		3,946,323		3,224,484		3,175,912	
Net Native „	2,318,576		1,920,924		1,399,530		1,162,293	
Exports,	16,117,730		14,220,357		9,466,622		13,005,083	
		22,338,997		20,087,604		14,090,636		17,343,288
TAMSUI, Net Foreign Imports,	551,511		538,937		612,739		744,734	
Net Native „	36,962		30,011		13,131		31,955	
Exports,	308,834		279,743		449,134		566,000	
		897,307		848,691		1,075,004		1,342,689
TAKOW, Net Foreign Imports,	648,099		836,938		844,442		1,083,401	
Net Native „	90,680		109,452		176,371		166,043	
Exports,	704,124		815,693		1,436,920		1,360,758	
		1,442,903		1,762,083		2,457,733		2,610,202
AMOY, Net Foreign Imports,	3,901,763		4,025,478		3,678,823		3,440,708	
Net Native „	1,664,549		1,951,057		1,450,481		1,657,185	
Exports,	2,373,819		3,110,920		2,558,032		3,437,682	
		7,940,131		9,087,455		7,687,336		8,535,575
SWATOW, Net Foreign Imports,	3,955,513		3,500,041		4,092,812		5,557,224	
Net Native „	1,778,329		2,396,210		2,603,932		3,655,824	
Exports,	2,793,668		2,496,660		2,727,774		3,889,459	
		8,527,510		8,392,911		9,424,518		13,102,507
CANTON, Net Foreign Imports,	6,946,711		5,795,594		6,094,962		6,259,962	
Net Native „	2,672,838		2,549,309		2,613,832		5,085,992	
Exports,	13,841,116		15,013,006		14,893,157		17,709,330	
		23,460,665		23,357,909		23,601,951		29,055,284
TOTAL... Net Foreign Imports,	72,559,835		76,038,103		76,559,219		80,902,715	
Net Native „	34,069,390		35,825,298		30,409,512		41,569,737	
Exports,	97,587,988	†	90,032,312	†	87,988,409	†	108,540,809	†
		170,147,823		166,070,415		164,547,628		189,443,524
Value of Exports abroad,	69,114,733		67,143,988		61,990,235		74,860,550	
Approximate Value of Home Trade,‡	28,473,255		22,888,324		25,998,174		33,680,259	

* For fuller particulars of the trade of Shanghai, see p. 20. The Re-exports of Foreign Goods from the other ports, with the exception perhaps of Amoy, are not sufficiently important in amount to be noticed. The Value of the Foreign Goods re-exported from Amoy, chiefly to the Formosan ports, is annexed.

1865, Tls.	597,991*	1869, Tls.	727,361*
1866, „	678,227*	1870, „	935,209*
1867, „	684,535	1871, „	905,076
1868, „	625,851		

* To Formosa alone.

† The full-faced figures given here are the sum of the *Foreign Imports* and *Native Exports* only, (*Native Imports* into one port being *Exports* from another,) and consequently represent the *whole* Trade (exclusive of Re-exports of Foreign Goods to Foreign ports,) carried on with and in China by Foreign vessels, during each year.

SHANGHAI,—GROSS AND NET VALUES OF THE TRADE OF THE PORT, 1866 TO 1871.

	1866.		1867.		1868.		1869.		1870.		1871.	
FOREIGN GOODS.	Net Values.	Gross Values.	Net Values.	Gross Values.	Net Values.	Gross Values.	Net Values.	Gross Values.	Net Values.	Gross Values.	Net Values.	Gross Values.
	Tls	Tls	Tls	Tls	Tls	Tls	Tls	Tls	Tls	Tls	Tls	Tls
Imported from Foreign Countries and Hongkong,	46,822,995		46,570,534		50,478,917		54,545,861		51,640,005		56,967,794	
Imported from Chinese Ports,	389,039		344,589		465,303		651,781		813,443		501,663	
Total Foreign Imports,		47,212,034		46,915,123		50,944,220		55,197,642		52,453,448		57,469,457
Re-exported to Foreign Countries and Hongkong, (chiefly to Japan,)	2,254,479		2,239,461		2,080,536		1,441,914		1,889,015		1,921,217	
Re-exported to Chinese Ports, (chiefly to Ningpo, the Northern and the Yangtsze Ports,)	33,295,050		31,803,137		35,669,202		37,535,050		38,635,544		40,792,424	
Total Foreign Re-exports,	35,549,529		34,042,598		37,749,738		38,976,964		40,524,559		42,713,641	
Net Total Foreign Imports,	11,662,505		12,872,525		13,194,482		16,220,678		11,928,889		14,755,816	
NATIVE PRODUCE.												
Imported, (chiefly from Hankow, Kiukiang, and Ningpo,)		27,080,252		30,870,751		34,981,943		34,801,884		30,971,638		36,666,399
Re-exported to Foreign Countries,	14,255,793		16,916,854		19,387,341		19,681,176		19,499,048		21,634,994	
Re-exported to Chinese Ports,	6,941,397		8,327,222		8,527,599		8,324,898		6,961,373		7,731,340	
Total Native Re-exports,	21,197,190		25,244,076		27,914,940		28,006,074		26,460,421		29,366,334	
Net Total Native Imports,	5,883,062		5,626,675		7,067,003		6,795,810		4,511,217		7,300,065	
Native Produce of local origin Exported to Foreign Countries,	11,068,877		12,311,220		19,765,988		15,271,409		15,873,375		18,511,454	
Native Produce of local origin Exported to Chinese Ports,	6,448,592		7,282,954		7,830,355		4,811,918		7,127,311		10,879,086	
Total Exports of local origin,		17,517,469		19,594,174		27,596,343		20,083,327		23,000,686		29,390,540
Gross Value of the Trade of the Port,		91,809,755		97,380,048		113,522,506		110,082,853		106,425,772		123,526,396
Net Value of the Trade of the Port, i.e. Foreign and Native Imports less Re-exports, and Native Exports of local origin,	35,063,036		38,093,374		47,857,828		43,099,815		39,440,792		51,446,421	

Mr Bredau

DEPARTMENT OF STATE RECEIVED JUN 25 1872

Ans'd

No 1146

Legation of the United States
Peking April 17. 1872
Frederick F Low
to
Department of State

Subject

Reception of Department Despatches Numbers 67. 68. 69. 70, 71 and 72

Acknowledges receipt of same.

No 146

Legation of the United States
Peking April 17. 1872

Sir:-

I have the honor to acknowledge the receipt of your despatches numbered 67, 68, 69, 70, 71 and 72, and Circulars numbered 14 and 15.

I have the honor to be
Sir,
Your obedient servant
Frederick F Low

Hon Hamilton Fish
Secretary of State

Mr. Pratt

acken

The Constitution of the U.S. prohibits citizens of the U.S. from accepting office or consent from another for matter believed to have been made clear by the circular of 15 Dec 1871

acknd 2 July

C# July 1

~~Ackd to 5 July~~

No 147 — 5 Enclosures

Legation of the United States
Peking Abril 18. 1872

Frederick F Low

to

Department of State

Subject

Protection of Swiss citizens in China.

Encloses copies and translations of correspondence with Prince Kung upon the subject.

No 147 —— 5 Enclosures

Legation of the United States
Peking April 18. 1872

Sir:-

The mail from San Francisco March 1st reached here yesterday, bringing your Circular No 10 explanatory of No 11 with reference to the protection of Swiss citizens.

From the correspondence between myself and Prince Kung, copies and translations of which I beg to enclose, it will be seen that the understanding

5

Hon Hamilton Fish
Secretary of State

come

come to with the Imperial Government is in accord with the instructions contained in your last circular.

I beg to enclose copy of my circular note to the Consuls upon the subject.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Enclosures

No 1 Mr Low to Prince Kung
November 11. 1871

No 2 Prince Kung to Mr Low Nov 19/71

" 3 Prince Kung to Mr Low April 2/72

" 4 Mr. Low to Prince Kung April 6/72

" 5 Mr Low to the Consuls April 7/72

Enclosure No 1
Despatch - 147

Legation of the United States.
Peking November 11. 1871.

Sir:-

I have the honor to inform Your Imperial Highness that, in accordance with the request of the Government of Switzerland made to that of the United States, the latter has authorized its Diplomatic and Consular Officers in China, with the consent of the Imperial Government, to exercise control over, and extend the usual protection to, citizens of the Swiss Republic resident, or sojourning in the Empire.

If this arrangement is agreeable to the Government of His Imperial Majesty I would thank you to notify me of the fact; and also inform the provincial officers, so that disputes between them and the Consuls, in regard to the jurisdiction of the

To H. I. H.
Prince Kung.

the latter may be avoided.

It is proper that I should add that the arrangement proposed is to be considered temporary;— to be terminated at the option of either party, or whenever the Swiss Confederation enters into treaty engagements, and sends diplomatic and consular officers to attend to its own affairs.

With renewed assurances of my high consideration,

I have the honor to be

Y. E. Highness' obedient Servt

Frederick F. Low

Enclosure No 2
Despatch 147

Prince Kung Chief Secretary of State for Foreign Affairs herewith makes a communication in reply.

On the 11th of November 1871 I received your Excellency's despatch saying:- "My Government in conformity with the request of Switzerland to act for her, if agreable to you would request that orders be transmitted for the instruction of the various provincial Authorities that they may be fully informed of this" &c &c

The Prince finds that Switzerland is a country having no treaty with China. Now she requests you to transact her business for her. Hence it becomes the duty of this Yamên at once to send a despatch to the Superintendent of Trade for the Southern Ports to inquire how the cases of the various non-treaty powers engaged in trade have heretofore been dealt with, as

To His Excellency
Fred. F. Low

as well as what method of manage-
ment has been observed formerly at
the treaty ports in regard to
Switzerland.

I await the arrival of an answer
when I will communicate further
with you. In addition thereto, it
is my duty, in the meantime, to
make you this reply.

Liu-g Chih, 10th year, 10th month, 7th day
19th November, 1871.

Enclosure No 3
Despatch " 147

Prince Kung, Chief Secretary of State for Foreign Affairs herewith makes a communication.

Some time since he received from your Excellency a despatch saying — "I have the honor to inform Your Imperial Highness that "in accordance with the request of the "Government of Switzerland" &c &c. (See Despatch No.)

At that time this Yamên sent despatches to the Superintendents of Trade for the Northern and Southern Ports, directing them to examine into the matter and make report, and we at that time so replied to you.

We have now received replies from the Superintendents of Trade for the Northern and Southern Ports stating that:— "the Swiss Confederacy "has merchants at the Ports: that in "importing and exporting merchand- "ise they themselves make entry of "the goods at the Customs: and the "duties are paid as by the Nation "whose ship is freighted with them.

Hitherto

"Hitherto their affairs have been man-
"aged by the Consuls of France".

The Prince finds that —
Switzerland is not a treaty power,
and hitherto non-treaty powers were
only allowed to have subjects at the
ports as merchants. They could not
appoint Consuls. When they met
with business affecting the two Gov-
ernments in common, all such was
attended to for them by the Customs
Officials. At this time Switzerland
requests that these matters be attended
to on her behalf by the Consuls of
your honored Nation.

Having received your Excellency's
communication the Prince would
have to reproach himself with a want
of kindness should he refuse to comply
with Your Excellency's wishes. But
all such matters should be arranged
and settled in accordance with
the principles enunciated by the
former American Minister, Mr. Reid. ※

※ (See Mr. Reid's despatch
of November 10th 1858 to the Chinese
Ministers.)

[This cannot be found]

The business of Swiss citizens can be managed by the American Consuls, but they cannot assume any additional authority to act as "Consuls for Switzerland."*

In addition to sending from this Yamên despatches to the Superintendents of Trade for the Northern and Southern Ports, and directing the Inspectorate General of Customs, in turn to issue the same instructions to all the Ports; to adjust business according to the precedents in case of non-treaty powers;- we also, as in duty bound, must make this communication for Your Excellency's inspection.

Tung Chih, 11th Year, 2nd mo. 25th day.
April 2nd 1872.

* The foregoing sentence being somewhat ambiguous a verbal explanation was asked from the ministers, who said in reply that the Government consented to the placing of Swiss citizens upon the same footing as citizens of the United States, and that United States

Consuls

Consuls would extend the same protection to and exercise the same control over the Swiss, as they do over American Citizens

Enclosure No 4
Despatch " 147

Legation of the United States,
Peking, april 16th 1872.

Sir,

I have had the honor to receive your despatch of april 2d. concerning the control and protection by American Consuls of Citizens of the Swiss Republic residing in China.

By the terms of your despatch it appears that the Government of His Imperial Majesty assents to the proposition made to it in my note of November 11th 1871 upon the following conditions:— American Consuls may manage the business of, exercise the same control over, and extend the same protection to, the Swiss as is now the case with American Citizens. This must be done in their capacity of American Consuls; it in no sense authorizes them to assume the title of, or act as, Swiss Consuls.

In reply I have to inform

Yours

His Imperial Highness,
Prince Kung.

Your Imperial Highness that these conditions are entirely satisfactory; and the Consuls of the United States will be instructed to act in accordance with this understanding.

In my former despatch upon this subject an error crept into it. The name (in Chinese) of the country in question was improperly written. The name inserted in this is, I understand, the one by which that country is known officially, and which will be used hereafter in my correspondence.

With renewed assurances of my high consideration,

I have the honor to be

Your Imperial Highness'

obedient Servant,

(Sgd) Frederick F. Low

Enclosure No 5
Despatch " 147

Legation of the United States,
Peking, April 17th 1872.

Sir,

Referring to Department Circular No 11 of 16th. ult. since last I have now to inform you that the Chinese Government has assented to the proposition contained therein. It is agreed that diplomatic and Consular officers of the United States shall extend protection to and exercise control over Citizens of the Swiss Republic resident in China similar to that now extended to American Citizens.

To enable you to properly perform the duties herein indicated it will be advisable for the Swiss Citizens resident at your port to register themselves in your Consulate, with a declaration that they claim your protection, and will submit themselves to your jurisdiction.

I may add that this concession on the part of the Chinese Government will

To United States Consul-General,
Shanghai.

will not in any manner warrant you in assuming the title or exercising the functions of Consul for Switzerland.

I am, Sir,

Your obedient Servant,

(Sgd) Frederick F Low

Note.

A copy of the above mutatis Mutandis has been sent to all the the Consulates in China

action
Let this be marked with others on the subject
C H Foley

Acknd

Mr Seward

No 148

Legation of the United States
Peking April 20. 1872
Frederick F. Low
to
Department of State

Subject

The exchange of books and documents with the Government or libraries.

Informs the Department that it is not practicable to do either in China.

No 148

Legation of the United States
Peking April 20 1872

Sir:-

Referring to Department Circular No 14 I have the honor to inform you that an exchange of public documents with this Government is at the present time impracticable; nor is there a library with which an exchange can be made, or in which to deposit books and documents such as are usually furnished the Legations

I

Hon Hamilton Fish
Secretary of State

I have the honor to be
Sir
Your obedient servant
Frederick F. Low

Mr Pratt

DEPARTMENT OF STATE RECEIVED JUN 29 1872

In orig to Sec of Treas, for his information and any observations that may occur to him. Request return C the July 1 did so 2d July

No 149 — 2 Enclosures

Legation of the United States
Peking April 23. 1872
Frederick F Low
to
Department of State

Subject

Transit Papers and Drawback certificates

Encloses a note from Prince Kung, and a draught of rules for the regulation of the issue of Transit Papers and Drawback certificates.

No 149 — 2 Enclosures

Legation of the United States
Peking April 23d - 1872

Sir:-

I have the honor to send herewith translation of a note recently received from the Foreign Office and a draught of rules for the regulation of the issue of Transit Passes and Drawback Certificates. The rules, you will observe, are not definitely determined upon; - they may be modified at the suggestion of the

Hon Hamilton Fish
Secretary of State.

the Chinese revenue officials or at the request of foreign Governments. Indeed, the limitation of time within which drawback certificates can be claimed is, to my mind, clearly a modification of the stipulations of treaty, that it cannot become binding upon the Treaty Powers until it shall receive their formal assent.

The really important point in the new rules concerning Transit Papers is the distinct recognition by the Government of the fact that foreign merchandize, having once paid the import duty fixed by the tariff

and

and a commutation inland duty of fifty per cent additional, is entitled to a certificate exempting it from all duties and dues while <u>in transitu</u> from the port of importation to any designated point in the Empire, without reference to the nationality of the owner or carrier.

Hitherto the Government has claimed that according to the XXVIII Article of the British Treaty of 1858 Transit Papers could only be claimed in cases where foreigners were the owners and carriers of the merchandize; and this opinion, it seems, was concurred in by the English Board

Board of Trade (See US diplomatic Correspondence 1870 p 320).

On the other hand the mercantile Community and most of the foreign ministers in Peking have contended that the X^th^ Article of the British Treaty of 1842 was not abrogated by the XXVIII th Article of the treaty of 1858; if not, then it is clear that foreign goods, whether in the hands of foreigners or Chinese are, upon payment of the inland duty at the place of import, entitled to a Pass exempting them from all duties and taxes while on their way to their destination in the interior. This construction

of

of the treaties seemed to me reasonable and proper; and I have joined with my colleagues in urging it upon the attention of the Government. Our construction has, after much discussion been assented to, and is now for the first time officially acknowledged.

It is proper that I should observe in this connection, that, pending the discussion of this question orders were undoubtedly sent to some of the ports to issue Passes to Chinese as an experiment, and the favorable results attending it undoubtedly hastened the decision of the

Foreign

Foreign Office somewhat.

The rules as proposed contain a great amount of detail which is entirely useless as a protection to the revenue, and at the same time will be vexatious to merchants. The Government officials affect to believe that these restrictions are necessary as a protection against collusion and fraud, Some modifications may yet be assented to, but is doubtful if any material changes will be made in the rules until experience shall have proved that the larger portion of them are unnecessary.

As

As will be seen by the Yamen's note no definite conclusion has been reached with reference to Transit Papers to cover native products from the place of growth or manufacture to the port of shipment.

The real point in dispute concerning Drawbacks is stated in my note to the Prince of 16th January, copy of which I beg to enclose. The one years limitation is now given up, and all drawback certificates heretofore claimed are to be issued without delay. The Government now proposes to limit the time within which

these

these certificates can be claimed to thirty months from the date of importation of the particular goods. Were the debentures issued for drawbacks payable in cash there would be force in the claim for a limitation of time; as however they are only receivable in payment of other duties the adjustment of the revenue accounts does not appear to call for any change in the treaty. In point of fact however, the term of thirty months proposed is, in my opinion, ample for all the necessities of trade; and if a slight concession on this point would

would bring about a relaxation in the stringency of some of the Transit rules I should have no hesitation in recommending the acceptance of the proposition.

The opinion of the Department on this point is respectfully requested.

The advantages which will accrue to foreign trade by a reasonably honest observance of the new rules will, I think, be considerable; and the knowledge which the officials will gain by their operation will, I hope, lead to other concessions in the same direction. It is not unlikely that obstructive officials

in

in some parts of the country will for a time, prevent the Scheme from working smoothly, at which merchants will of right complain, but patience and firmness will, I trust, cure these evils.

I have not as yet replied to the Yamens note, and shall not until the translations which I have sent to the Consul-General shall have been made known. Possibly the discussions which the publication of the rules will excite may tend to throw additional light upon the subjects, which will be a help in the further discussions

discussions that may be found necessary in Peking

I have the honor to be
Sir,
Your obedient Servant
Frederick F. Low

Enclosures

No 1 Prince Kung to Mr Low
March 23. 1872

No 2 Mr Low to Prince Kung
January 16 1872

Transit Dues.

Rule I. applications for Transit Passes, under which to carry Imports inland, must be made by the merchant who originally imported the goods. He must state the denomination and quantity of the goods; the name of the ship in which they were imported, and the date of her arrival; the place to which they are to be carried and the name of the person who is to carry them.

Rule II. If the applicant be not the original importer, in addition to the information required by the foregoing rule, to which he will sign his own name, he must state who the original importer was, and he must cause the original importer to certify that it was he who imported the goods, on the face of his application. Should the firm of the original importer have been closed, he need not require the original importer to sign the application.

Rule

Rule III. The information required by the two foregoing rules having been furnished under signature, the certificate (or pass) will be issued on payment of the half duty, and the goods can then be carried inland covered by this certificate, whether the trader carrying be Chinese or foreign. To enable traders, Chinese or foreign, however, to carry goods inland under cover of the certificate, it is essential that the goods be really foreign imports.

Rule IV. The certificate obtained as above for the carriage of foreign goods inland, must be exhibited at every barrier or duty station along the line of transit, and any such office having ascertained by inspection that the goods are really the goods certificated, and are not being carried by any other than the route by which they should be carried, will then stamp the certificate and allow the goods to proceed without payment of likin charges. If it be found, on inspection of the certificate,

that

that the goods are not on the line on which they ought to be, or that they are other than the goods for which the certificate was taken out, these being acts of departure from the proper route and smuggling, the whole will be confiscated as provided by Rule VII of those appended to the Tariff.

The Certificate (or Pass) here spoken of is available only as security against taxation in addition to the duties already paid on goods [en route [from port to inland destination]. On the arrival of the goods it covers at the place of destination specified in it, it ceases to have any value, and should be immediately presented to the nearest authority, who will enter upon it the date on which the merchant specified arrived with the goods specified, and will affix his seal to it, and hand it back to the merchant presenting it, to serve as his guarantee against levy of likin or other tax in the place to which the goods have been carried

so

so long as they remain unsold.

If, on arrival of the goods at their point of destination, the certificate be not presented as above, an additional half-tariff duty will be levied upon them as a fine. When they shall have been sold, the local government will of course levy the likin of the buyer, and with this levy the dealer who brought up the goods will have no concern.

Rule V. Whenever a Certificate (or Pass) is applied for for the carriage of Imports inland, a term will be fixed for its reproduction, the number of days being calculated according to the distance between the port where the application is made, and the place of destination as declared by the applicant, and so many days being allowed for every 100 li; and a note will accordingly be made upon the certificate, that it was issued on such a date by the Custom House specified to the merchant specified, and that he is to surrender it in so many days to the Yamên, or inland duty station specified.

specified. The certificate will be stamped with the official seal (of the Superintendent), and on issuing it he will advise the proper authority at the place entered as the place to which the imports are to be carried, who at any time before the expiry of the transit term, will put his visa on the certificate. On the sale of the goods, he will call in the certificate and he will forward it to the Custom House which issued it to be cancelled.

(Original Note.) The Superintendent of Customs and the Inspector-General will settle together the number of days to be allowed with reference to such or such a distance, as the term within which the certificate is to be surrendered.

Rule VI. Imports carried inland under certificate must be accompanied by the certificate. Where a trader is carrying foreign imports not enumerated in his certificate, or goods without any certificate at all, if he be bonâ fide prepared to pay the barrier duties and octroi charges at the different stations he passes,

it

it will be his duty, as he arrives at the barriers and stations to give notice that his goods are uncertificated, in order that these duties and charges may be levied thereon. If he do not give such notice, his goods will be dealt with as contraband.

If the goods carried be other goods than those particularised in the certificate; or if they exceed the quantity specified in it; the barrier or station detecting [the irregularity] is authorised to detain the goods and to make a written report to the Custom House, which issued the Certificate, and which in accordance with the treaty will investigate the case and [if necessary] confiscate the goods.

Drawbacks & Exemption Certificates.

Rule 1. If a merchant desire to re-export Imports that have paid Tariff Duty to a foreign country, it will be his business to give notice to the Customs, and the officer deputed by the Superintendent having ascertained by inspection that the goods are the original goods imported, and in the original package, and that none have been withdrawn or exchanged (1) the issue of a Drawback to the applicant will be authorised, provided that the application shall have been made in thirty months from the day the Imports entered the port. [If the time the goods have been in port] exceed this term, [the importer] will not be authorised to take out (lit. apply for and receive) a Drawback, and if the

goods

(1) The phrase may mean simply "changed"; but it might be construed so that the withdrawal of musters would interfere with the Drawback.

goods be found to be other than the goods they are stated to be, the Drawback will be refused, and the goods will farther be confiscated, in accordance with the Treaty.

Rule II. Merchants sending Imports that have paid the full duty at one port to any other of the northern or southern ports, excepting always the ports on the Yang tzŭ at which no Import Duty is collected (2), are free to apply either for an Exemption Certificate or a Drawback, as it may suit their convenience. The Drawback can only be claimed as in the case of Imports re-exported to a foreign port, within the limit of thirty months, and in all particulars affecting it the provisions of Rule I must be abided by; but the Exemption Certificate will have to be dealt with as the Treaty farther prescribes.

Rule III. If the merchant applying for Drawback or Exemption Certificate be other than the original importer, the application must bear not only his own signature

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(2) Under Treaty it may be whenever there is trade direct with those Ports.

signature, but also the signature of the original importer.

If the establishment of the latter shall have been closed, it will be simply necessary that the goods be identified by inspection, and the signature of the original importer can be dispensed with.

Rule IV. Application for drawbacks or Exemption Certificates on Imports re-exported must be made before the ship's Port Clearance is issued, and the document applied for will be issued, if the Customs find that the goods concerned are the original goods unchanged (3). When a ship's accounts are closed and her Clearance is issued, inasmuch as examination and identification of goods for which a drawback or Certificate is claimed is no longer possible, the Customs cannot in such a case entertain the application.

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(3) Same phrase as that referred to in note (1).

Enclosure N° 2
Dispatch # 149

Legation of the United States,
Peking, January 16th 1872.

Sir,

The Consul-General at Shanghai informs me that Mess^rs. Frazer & Co, an American firm at that place, imported ten bales of pilot cloth, and on the 15th of August 1870 entered them at the Customs and paid the duty amounting to 140 Hai-Kuan taels, 8 mace and 8 candareens.

On the 23^d of November 1871 the same firm exported eight bales of the same goods to Nagasaki, Japan, on which they are entitled to a drawback of 112 Hai-Kuan taels, 7 mace. The goods were all properly examined prior to exportation and no irregularity or fraud was found. Upon application to the Customs for the proper certificate it was refused. The only reason assigned for refusing the drawback is a rule or regulation saying that drawbacks shall

To His Imperial Highness
Prince Kung.

shall not be allowed on goods unless re-exported within one year from date of importation.

Article XLV of the British Treaty of 1858 provides that when foreign goods on which the import duty has been paid are re-exported the Customs' Authorities shall issue a certificate stating the amount of duties paid on the same, which certificate shall be taken as so much money in payment of other import duties. No time is mentioned within which the goods must be re-exported to entitle them to drawback.

Article XXX of the Treaty between the United States and China stipulates that Citizens of the United States shall enjoy all the rights and privileges granted by treaty to citizens or subjects of any other nation.

In view of the provisions in the treaties above mentioned it is clear that the refusal of the Shanghai Commissioner of Customs is wrong, and the rule or regulation upon

which

which it is based is a clear violation of the Treaties. I have, therefore, most respectfully to request that Your Imperial Highness will order the Inspector-General of Customs to cause a certificate to be issued to Messrs. Frazer & Co for the amount of drawback due them; and also, that you will without delay cause the regulation fixing a limitation of one year for re-exports to entitle them to drawback to be annulled.

I have the honor to be,

Your Imperial Highness'

obedient Servant,

Frederick F Low

Miss Baker

Please furnish a
copy of this paper
for Legislative Division

E. Goddard
Asst Chf

S. 601

Enclosure No 1
Despatch " 149

The Prince of Kung and the Ministers [whose cards are enclosed] write as follows:

In the 7th moon of last year (August 1871) the Prince and the Ministers instructed W. Hart Inspector-General of Customs to proceed to Shanghai, and in concert with the Intendant (Taotai) who is Superintendent of Customs at that port, to prepare rules for the satisfactory regulation of drawbacks, Transit Certificates inwards and Transit Certificates outwards.

In the 11th moon (December and January) the Inspector-General submitted the Rules framed on consultation as above, for the consideration [of the Prince and Ministers, by whom] they have been again and again discussed; the desideratum being that, while trade should not be inconvenienced, no loss should either be sustained by the Customs' revenue; that not only wrong doing on the part of foreign merchants

should

should be guarded against, but that various malpractices of Chinese merchants, such as misrepresentation and collusion (1), should also be put a stop to.

Upon the rules relating to the Drawback and to Transit Certificates inwards, [the Yamên] has come to a decision, but it will still be necessary to forward them to the Ministers Superintendent of Trade for the Northern and Southern ports, who will instruct the Intendants being Superintendents of Customs (2) to examine them most carefully.

The Chinese Government has the right at every port to adopt the means best calculated to secure the revenue against fraud or smuggling; [this is not only the spirit, but] the plain language of the Treaty. The Intendants

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(1) Collusion with Foreigners.

(2) At Foochow the Tartar General, at Canton an officer of the Imperial Household.

Intendants appointed to the Custom Houses at the ports being the officers [whose business it is] to manage all Customs business, and consequently the persons best informed in all particulars affecting this, it is, of course, right that they should be directed to look into [what is proposed] with very great care, that so, when they shall have thoroughly digested these regulations, regulations may then be so framed as to leave them without occasion for pretending that they are inconvenient, and that they are consequently unable faithfully to abide by arrangements to which the Chinese [Authorities or Government] have agreed.

When the two Ministers Superintendent shall have replied, [the Prince and Ministers] will after due deliberation address an official communication to the American Minister and to the Ministers of the other Powers, in order that they may instruct [their subordinates] accordingly. Meanwhile

they

They forward in this note the Draughts of the regulations affecting Drawbacks and Transit Certificates inwards, which have been considered with the Inspector General, for the information of the Americ Minister to whom they will be obliged for an early reply.

As to the rule to affect the memorandum and Transit Certificate for produce, the Yamên has not yet satisfied itself. As, however, in accordance with the spirit of the Treaty, no produce but produce destined for a foreign port can be allowed to come within the scope of the Transit Regulations(1); and merchants will of necessity be obliged to pay Barrier duties at the Barriers, and Likin duties at the Likin stations on all produce not destined for export abroad or destined to be carried to another Treaty port, [the writers] will be obliged to the American Minister to issue instructions to

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(1) Literally the regulations of the Barriers. No produce but what is intended for export abroad is to have the benefit of the Treaty provisions.

to the foreign merchants at the ports in this sense.

As regards drawbacks at Shanghai, the Yamên is writing to the Minister Superintendent of Trade in the Southern Ports to instruct the Intendant to issue Drawbacks in all cases occurring before the end of the tenth foreign month of the 10th. year of Tung Chih (31st. October 1871), where it is ascertained that drawbacks have been applied for and refused. From the above date forward Merchants applying will of course have to conform to the new regulations. Such is the object of this note.

Compliments.

2d. moon 18th. day

(23d. March 1872).

Mr. Bates

No 150

action
subject of printing papers
on the subj. will be considered when
papers are prepared for com. to Congress
with President Message at opening of
next session
Meanwhile not advisable for
ministers to print them,
Cff July 1
Recd 2d 5th July

Legation of the United States
Peking April 25. 1872
Frederick F. Low
to
Department of State

Subject.

Light Houses on the coast of China.

Refers to the previous correspondence on the subject and asks that, if convenient, it may be printed.

No 150

Legation of the United States
Peking April 25 1872

Sir:-

About a year ago I received your No 59 calling my attention to the alleged necessity that existed for additional Light Houses and works of a similar character on the coast of China. I was requested to take this subject into consideration and give the Department the benefit of my opinion; and if deemed by

Hon Hamilton Fish
Secretary of State

by me advisable I was authorized to bring the subject to the attention of the Imperial Government with a view of securing an addition to the Light House staff, and also additional appropriations of money. This subject, you stated had been brought to the attention of the Department by the Consul-General Seward in a despatch dated Jany 13. 1871

Prior to the receipt of your despatch I had addressed the Department upon the subject (No 62 of April 10) in which was enclosed an elaborate memorandum which had been furnished me by the Inspector-General of

of Customs. That document contained detailed information as to the amount of Tonnage Dues annually collected, the sum appropriated annually for coast, rivers, and harbor improvements, the number and class of Light Houses, Light Ships, Buoys, Beacons &c already built and in process of construction, and the plans of operations for the next six or eight years.

On the 13th of May my despatch No 67, in reply to the one received from the Department, was sent. In that I referred you to my

previous

previous one and Mr Harts
memorandum, from which
it appeared that the Chinese
Government was doing about
as much as could reasonably
be expected; and expressed the
opinion that the addition to
the Light House staff suggested
by Mr Seward did not, under
the then existing circumstances,
seem necessary; I also said
that I should await further
instructions from the Department
after it should have examined
the subject with the additional
information before it, prior to
taking any action. Since then
I have heard nothing further

upon

upon the subject from the Department, from which I was led to infer that my views had been concurred in.

In the volume of Diplomatic Correspondence for 1871 just received, is contained, I observe, your No 37 without any reply or the memorandum before referred to, from which it might be inferred that the attention had not been paid to your instructions that the importance of the subject deserved. This would, however, be of little consequence were it not for the fact that all the correspondence concerning China is republished

in

in the local papers at Shanghai and Hong Kong.

As was stated in one of my previous despatches upon this subject, a mistaken notion concerning the amount that is really being expended in Light House matters, obtains very generally at the ports. Even Mr Seward understood the question very imperfectly, for he freely admitted to me after he had read Mr Hart's memorandum, that he was labouring under an erroneous impression when his despatch of January 13th was written. The information in the possession

of

of the Department would, if made public, go far to enlighten the people at the Porte. In this view it is perhaps unfortunate that it was omitted.

My object in again referring to the subject is for the purpose of asking whether there is not some convenient way by which the Department can now make public the two dispatches before referred to and the memorandum; and if not, whether there would be objection to my having them printed for circulation here. The latter I do not care to do unless the former is impracticable.

I have the honor to be

Sir

Sir,

Your obedient servant

Frederick F. Low

Encl 7 No 6 Comm July 24 to Platt?

ack

DEPARTMENT RECEIVED JUL 22 1872 OF STATE

No 151 6 Enclosures

Ans. 20 Aug st.

Legation of the United States

Peking May 4. 1872

Frederick F Low

to

Department of State

Subject: Ward Estate claim.

Claims of John Fogg Twombly against the Chinese Government.

Encloses copies and translations of correspondence between Prince Kung & himself concerning them.

No 151 ——— 6 Enclosures

Legation of the United States
Peking May 4th 1872

Sir:-

I have received from Mr John Fogg Twombly of Shanghai two letters, copies of which are enclosed herewith, respecting certain claims which he holds against the Chinese Government. I have also received from Mr Consul General Seward copies of two notes which he has addressed to Mr

Hon Hamilton Fish
Secretary of State

Mr Twombly, in which the history of the claims before referred to is clearly and accurately stated. Efforts having been made, both by the Consul-General and myself, to induce the Chinese officials to settle the claims without success, and as there seems small prospect of better results in the future, Mr Twombly proposes to bring the whole question to the attention of the Department. With that object in view I am now asked to furnish the Department with any information in my possession which may be useful in enabling you

you to arrive at a clear understanding of the whole question at issue.

So far as the history of the claims is concerned the two notes of the Consul-General to Mr Twombly, copies of which have, I understand, been sent to the Department, contain substantially all the information in the possession of the Legation; it is, therefore, only necessary for me to state what action I have taken, and the result.

About two years since Mr Twombly visited Peking, & laid before me the two claims and asked my assistance

in

in enforcing their collection from the Imperial Government. I made a careful and thorough examination into the whole business, and arrived at the conclusion that the balance due upon the award of the arbitrators, Messrs Cunningham and Hanbury, was a just and proper claim which the Government should either pay itself, or compel the local authorities at Shanghai to do. My correspondence with Prince Kung, copies and translations of which are sent herewith, contain my opinions as to the validity

3.4.5 & 6

of

of the claim, my action in endeavoring to secure its liquidation, the refusal of the Government to pay it, and the grounds upon which the refusal is based. As this correspondence contains the substance of the arguments brought forward on either side it does not seem necessary to burden the Department with additional documentary evidence, or to refer to the personal discussions between myself and the Ministers of the Yamen upon the subject.

The "Ward Estate" claim has never been taken up by

me

me officially. It seemed to rest upon a less firm foundation than the other; and as the Government refuses to recognise the validity of the better one I deemed it inexpedient to attempt to push the other.

It is hardly necessary for me to enter into a discussion of, or review the arguments of the Ex-Foutai, Wei in justification of his refusal to pay the award of an arbitration, which he voluntarily consented to beforehand. They are frivolous and avaricious, and not unlike, I regret to say, those brought forward by Chinese officials generally

generally when they desire to escape responsibility.

I may add that, in my opinion, there is small prospect that reason or argument will induce the Government to recede from its present position with respect to these claims.

I have the honor to be
Sir,
Your obedient Servant
Frederick F. Low

Enclosures

No 1 Mr Twombly to Mr Low
March 20. 1872.

" 2 Mr Twombly to Mr Low
March 20. 1872.

" 3 Mr Low to Prince Kung
July 7. 1870.

" 4 Prince Kung to Mr Low
July 16 1870.

" 5 Mr Low to Prince Kung
October 20. 1870.

" 6 Prince Kung to Mr Low
November 28. 1870.

Enclosure No 1

Despatch # 151

Shanghai, March 20th 1872.

Sir,

At Peking, on the 17th of June, 1870, I addressed you regarding the Balance of the Claims unpaid – as awarded by the arbitrators Messrs Cunningham and Hanbury, January 18th and 20th, 1864, against the Chinese Imperial Government, and made payable, in their award, February 1864.

The documents, relating to the case, in the Legation, as long previously forwarded from this port, by Mr Consul-General Seward, were therein referred to. You having examined the matter, promised your best attention to the Claims, and as promptly and urgently as possible, to press them upon the attention of the Government. Incidents then known and other incidents then following, it is understood delayed your action.

In an interview in the autumn of 1871 you narrated your subsequent proceedings, closing, by intimating

you

you had used your best exertions and exhausted your resources, on behalf of the claimants without avail.

I, thereon, proposed to bring the claims to the notice of the Department of State, at Washington, in furtherance of which, you, very kindly, intimated your readiness to make a statement of their nature and present position, from the Legation Archives, and your action upon them; that the Department might be fully advised.

My present object in addressing you, is, to avail of your kindness, by asking you to do so, at your earliest convenience, I am purposing, immediately, visiting the United States, and soon after arrival there, I wish to lay the claims, duly authenticated, before the State Department.

At my request Mr. Consul-General Seward has drawn up, a statement of his connection with the claims, which gives, in order, and very completely the early history of them, and his exertions both

both before and after forwarding them to the Legation, for their collection.

A copy of this is forwarded to you for your information, and with the hope that it may be found of service in drawing up the Statement asked of you.

I have the honor to be,

Sir,

Your obedient Servant,

(signed) John Fogg Twombly,

Agent for Claimants.

H. C.

Hon. F. F. Low,

U. S. Minister Plenipotentiary,

&c. &c. &c.

Peking.

Enclosure No 2
Dispatch No 151

Shanghai, March 20th 1872.

Sir,

I have, This day, addressed you, regarding the Claims against the Chinese Imperial Government, as arbitrated by Messrs. Cunningham and Hanbury, in January, 1864, and still remaining unpaid.

In this letter, I wish to speak of the Kindred Claim of the Estate of the late Gen. F. F. Ward.

I am aware that the matter of This claim, has not, formally and finally, been transferred from the Consulate General here, to the Legation of the United States, at Peking; but, from the first, communications have been exchanged, and interviews had, regarding it, both specially, and in connection with the arbitrated Claims. The Report of the Arbitrators, eliminating it, for reasons stated, from the Claims after passed upon, is in the Legation Archives. The laches, therein spoken, of as on the part

of

of the Representative at the time, of the Estate, ceased in June, 1868, by the production of duly authenticated accounts, on its behalf, from New York, of money received from the Chinese Imperial Government, for expenditure, for Materials of War &c. in England and the United States, for its use. These accounts were exhibited in an interview, with you, regarding the Claim of the Estate against the Chinese Imperial Government at Pekin in June, 1870.

The claim, as you are aware, primarily rests upon the dying statement of Gen. Ward, immediately after receiving a mortal wound in an engagement with the Taiping Rebels, near Ningpo, as at his request written down, and certified to, by two British Naval Officers connected with the British Forces accompanying his Command; and the subsequent admissions of Wos Taotai of the District of Shanghai at the time and under whom Ward served, and who, after, acted as Commissioner for the Settlement of Claims against the Chinese Government; connected with the

so-called

so-called Ward Forces. Other corroborating circumstances have, from time to time, appeared.

The Estate labors under the disadvantage, of not having the Claim adjudicated, or allowed, except, as allowed in connection with the other Claims spoken of in the award of Messrs. Rodgers and Jenkins, subsequently replaced by the award of Messrs. Cunningham and Hanbury, which, as mentioned, did not embrace this claim.

As intimated, in Communication before referred to, regarding the awarded claims, I wish to present this Claim, in conjunction with those, to the State Department, at Washington.

You would, therefore, greatly oblige, if you would give such information, as you may be able, and make such suggestions, as you may deem expedient, with a view of placing, clearly, before the Department, the nature and present position of the Claim, and inducing its favorable Consideration of it,

and

and action upon it.

Mr. Consul General Seward, having been familiar with the Claim, from the beginning, promptly responding to my request, will give, more in detail, the history, nature, and present position of it, relieving you of the labor of giving anything more, than the general views and action of the Legation regarding it, as shewn by its archives. A copy will be sent you for information &c.

I have the honor to be,

Sir,

Your obedient Servant,

(signed) John Fogg Twombly.

adm. & Atty. of the sole Heir of the Estate in China.

H. C.

Hon. F. F. Low,

U. S. Minister Plenipotentiary,

&c. &c. &c.

Peking.

Enclosure No 3
Despatch No 151

Legation of the United States,
Peking, July 7th 1870.

To His Imperial Highness Prince Kung,
&c. &c. &c.

Sir,

Mr. John F. Twombly of the American firm of H. Fogg & Co at Shanghai recently arrived in this city, and presented to me the following statement.

"In the month of February 1864, Mr. Seward, the American Consul at Shanghai, and Wu, the Intendant of the Soochan Circuit, had a consultation respecting the accounts presented by Messrs. H. Fogg & Co and others, for supplies furnished during the years 1861 and 1862 to the land and marine forces of the Chinese Government at various times; and they agreed to refer them all to two merchants, viz. Thomas Hanbury an Englishman, and Edward Cunningham an American, to examine and decide. The letters which passed

between

between these two officers are appended, and Wu affixed his seal to the agreement to take their decision as a settlement of the matter.

Messrs. Hanbury and Cumming have went over all the accounts, and decided that the sums of Taels 28,070.81 and $ 23,398 were due without interest. Since that arbitration, the Intendant has paid on each account the sum of fifteen thousand taels and dollars, and something over, but nothing since those payments. In the year 1865, Consul-General Seward urged the Intendant to liquidate the claims, but he replied that as he had long ago left the post, he would hear nothing about the matter. The Intendancy was then applied to, who responded that the business belonged to his predecessor and he was unable to settle it.

Last year Mr. Twombly having waited till Mr. Seward returned from the United States, went with him up to the city of Hangchau to see Wu about these accounts, and urge him to settle them.

them. He evaded the application, and said that there were still many unsettled accounts on this side, and he would have nothing to do with them at any rate. The Consul-General having now gone home, there is no one to prosecute the matter at Shanghai, and Mr. Twombly has come to Peking himself to present it.

The balance due after the last payments was Taels 19,458.5, to which is now to be added interest for seven years, making the total amount of the claim Taels 35,803.7.3; which, as the present Intendant at Shanghai refuses to pay, he requests that the "Foreign Office will compel him to settle."

I have myself carefully looked over all these accounts referred to in the preceding statement, and find them to consist of supplies furnished to the forces and vessels of China, when they were engaged in suppressing the rebellion in Kiangnan, and are really what they profess to be. The two arbitrators, Mr. Hanbury and Mr. Cunningham, were

of

of such high character that they would, I can assure you, never admit an account which was not vouched for. The former Intendant Wu alledges that there are many unexplained accounts relating to this matter, and he cannot now go again go over them; but the fact is, that the accounts not cleared up, to which he refers were never brought in by the arbitrators, and cannot therefore be brought forward here.

At this time the region of Kiangnan is quiet, and the people there now quietly pursue their avocations each one in his own way; but it was by means of the supplies furnished by Messrs. H. Fogg & Co and others, that in former years this peace was in a measure owing. Without them, the war could not have been carried on, and it is right that this small balance should be paid to the claimants. Seeing that the two Intendants Wu and Ying thus turned its settlement off one on the other, the interest has accumulated, and the longer it is

unpaid

unpaid the more it becomes.

These are, no doubt, accounts for articles which were used by the Chinese Government, and should have been settled by the Intendant at the time; and I therefore request your Imperial Highness to adopt measures for speedily paying the sum, principal and interest, due to Mess.rs A. Sogg & Co and others. There is not the least necessity for appointing any one to examine their accounts again.

I enclose a copy of the letters which passed between the Consul-General and Intendant about their agreement to the arbitration for Y. I. H. information.

I have the honor to be,

Sir,

Your Imperial Highness'

obedient Servant,

(Sg.d) Frederick F. Low)

Enclosure No 4
Despatch No 151

Tungchi, 9th. year, 6th. moon, 18th. day.
July 16th. 1870.

Prince Kung, Chief Secretary of State for Foreign Affairs, herewith replies upon business.

On the 7th. instant I had the honor to receive your Excellency's dispatch relating to the claim of Messrs. H. Fogg & Co and others for stores furnished by them to the Chinese Government in 1861 and 1862, according to the decision of Messrs. Hanbury and Cunningham, who were appointed to examine and arbitrate the accounts; and requesting me to adopt measures for paying the balance still due on them, &c. &c.

A copy of this dispatch and its inclosures has been sent from this office to the Superintendent of Trade and the Governor of Kiangsu, with directions to them to inquire into this matter and make a report for action to be taken upon it.

its

As soon as their reply is received, I will inform your Excellency of its purport, and meanwhile send this that you may know what has been done.

To His Excellency
Frederick F. Low
U. S. Minister to China.

Enclosure No 5
Despatch No 151

Legation of the United States.
Peking, October 20th 1870.

To His Imperial Highness Prince Kung
&c. &c. &c.

Sir,

On the 7th of July last, I addressed a communication to Y. I. H. respecting the claim of the American merchant John F. Trowbridge of the firm of F. Togg & Co for goods procured of them in 1861 and 1862, on which there was an unpaid balance still due, which I requested might be paid. To this I received a reply, stating that a dispatch had been sent to the Superintendent of Trade at Shanghai and to the Governor of Kiangsu to inquire into it; and that when their report was received, another communication would be sent upon the matter.

Three months have now elapsed since that was received and nothing has been done. These articles were for the use of the Chinese troops warring against the Taipings

Taiping rebels in those years, and these merchants sold them in full faith in the intention of the Government to pay for them; and yet it has allowed the matter to drag on until now. Peace has been restored throughout those regions for more than six years, and yet this small amount, between thirty and forty thousand taels, has not yet been pushed to a settlement; and that too when its liquidation involves the reputation of China, and it is greatly for its advantage to maintain this good name. The items of this long standing account have been all carefully examined, so that there is no need of again going over them; the arbitrators, Messrs. Cunningham and Hanbury, with other persons, and much of the evidence, cannot now be obtained; and therefore another inquiry into them is impossible.

I therefore send this note to urge a speedy payment of the claim of Messrs. H. Fogg & Co, both for the evidence it will give that their confidence was not

not misplaced, and a further proof of the amicable relations existing between our countries.

I avail myself of this opportunity to wish Y. I. H. every happiness.

Your obedient

Servant,

(Sgd) Frederick F Lord

Enclosure No 6
Dispatch No 151

Tungchi, 9th year, intercalary 10th moon, 5th day. November 28th 1870.

Prince Kung, Chief Secretary of State for foreign affairs, herewith returns a reply.

I had the honor to receive your Excellency's dispatch of July 7. 1870, in which you informed me that Mr. John F. Twombly of the American firm of A. Fogg & Co had brought to your notice the examination of the accounts of that House for supplies furnished to Chinese troops, by the umpires Messrs. Hanbury and Cunningham, who were appointed by the consent of G. F. Seward, H. States' Consul-General and Wu, then Intendant of Circuit; and had found that there was owing the firm the sum of 28,078.81 taels, and $ 23,398, of which Wu had already paid over the sum of 15000 taels and more, and about $ 15,000, leaving still a balance unpaid altogether of 19,458.5 taels, to which add seven years'

interest

interest, making the total sum of 35,803.73 taels now due, which you request may be paid up.

On receiving this dispatch, it was referred to the Superintendent of Commerce at Shanghai and to the Governor of Kiangsu, for them to have an examination made and send back a full report upon the matter; as was made known to you at the time [July 16, 1870]. I have since received your note of Oct. 20th, in which you state, in reference to this claim, that three months have elapsed without obtaining any answer, and urge many considerations why it should be settled without delay.

I was just on the point of replying to your note, when the report from the Superintendent of Trade at Shanghai came to hand, inclosing the reply made to him by Wu, formerly Intendant at Shanghai, which was as follows:—

"In the winter of 1862 I was "engaged in preparing [Ward's] Ever

Victorious

"Victorious Force for the attack on Nan-
"king to drive out the rebels; its commander
"Burgevine and Commissary-general
"Benson both availed themselves of the
"chance to demand additional arms for the
"Force ... I applied to the Commissioner of
"Revenue and Grain, Yang [also known
"as Takee], who advanced the sums of
"34,000 taels and $78,000 for the purpose.
"But in consequence of Burgevine not
"carrying out his orders, and having got
"into a quarrel with the Commissioner of
"Grain, the whole enterprise fell through.
"Of the money paid out, the Force itself
"received only about $15,000, and the
"rest was left in Benson's hands.

"In March 1862, The commander
"of the Force, General Ward, having received
"orders from the [acting] Governor of the pro-
"vince, Tseh Hwan, to make an attack on
"Tsechau, Changchau, and other places,
"wished to procure some foreign steamers
"and various sorts of guns and artillery.
"Yang and I, on getting the orders, succeeded
"in raising a loan in various places of

270,000

"270,000 taels, which Gen. Ward received
"and sent to the United States in bills,
"but after his death not a ship or a gun
"was ever received in Shanghai. Further,
"the amount of $46,553 owed for arms
"and ammunition bought in England was
"never sent forward out of this sum.

"This large sum of money has been
"a matter of much discussion with the U.S.
"consul G. F. Seward, whom I have often
"requested to take stringent measures to
"recover for me, but without any response
"on his part. Indeed, not long after, I was
"suddenly presented by him with a long
"bill for articles procured, amounting to
"the sums of 290,000 taels and $82,090 or
"more, which he said was made up of
"stores, arms, and ammunition procured
"at various shops for the Ever Victorious
"Force, and for the donatives due to Gen.
"Ward. These amounts he wished to have
"me pay immediately, but he never said
"a word about the previous sums, nor even
"referred to the obligations then entered
"into. The [native] lower officers and

brokers

"brokers connected with the Force declared
"too that they knew nothing of these pur-
"chases.

"I then pointed out some things
"in the matter that were not clear, and
"the consul appointed Kearny Rodgers and
"J. B. Jenkins to examine the accounts; but
"before they had finished their work, he
"appointed Mr. Hanbury, an English mer-
"chant, and Mr. Cunningham, an American
"merchant, to go over them again. Previous
"to these latter commencing their work the
"consul [and I] entered into an agreement
"and signed it, in which it was clearly stated
"that he would exert himself all he could to
"get back the money still due from Ward
"and Benson on their advances.

"after ment. Hanbury and Cun-
"ningham had gone over all the details
"and items, they did not make any distinct-
"ion between what was made up and what
"was honest in them, but ended by urging
"me to pay the bills due to the various
"shopkeepers, leaving the securities given by
"both Ward and Benson for the large sums

paid

"paid to them as of no account whatever
"and wholly unsettled.

"I was altogether dissatisfied
"with this result, and would have ex-
"pressed my rejection of their conclusion;
"but remembering that our countries were
"on good terms, and that General Ward
"had lost his life in the service of his
"Majesty, I tried to find out some way of
"settling the matter, without compromising
"the character of the parties concerned. I
"therefore dealt as leniently as possible with
"the bills and accounts presented by the
"N. S. consul, and sorted them into the
"accepted and rejected accounts, of which
"the former amounted to 15,682 taels, and
"$ 16,662. Besides the sums of 4570 taels
"and $ 11,270 paid to the foreign storekeepers
"from time to time, I have also paid over
"to W. Seward the sums of 21,174 taels
"and $ 5392 or so, for which I have his
"receipts.

"Among the various accounts
"which I did not approve, were set aside
"a score or more, amounting altogether

to

"to 13,681 taels and $7730, I terming them
"'approved by the arbitrators'; these accounts
"the consul brought before me in two seperate
"dispatches, and asking for their settle-
"ment, which I refused to pay at the
"time. The reason was, that the outstand-
"ing obligations of Ward and Benson were
"not paid up according to the terms of our
"agreement. The discussion upon this matter
"was long — the replies and rejoinders, the
"whole documents make a pile a foot high.

"Since the summer of 1864, the
"U.S. consul Seward has known that he has
"had no ground for an argument, and thus
"the question has long remained in abeyance.
"Yang (or Takee) died after that date, and
"I left office in 1867 on account of illness,
"while W. Cunningham, one of the ar-
"bitrators had left the country. In the
"summer of 1868, W. Seward wrote me two
"despatches upon the subject, and made
"me a visit at my house in Hangchau with
"the head of the firm of A. Fogg & Co to have
"a personal conference upon it. I replied to
"him with the same arguments that I had

used

"used before, to which he had nothing
"more satisfactory to say, and went off.

"Two years have since passed
"and he has not returned. The affair is
"now ten years old since the first item
"was charged, during which time he has
"not dared to make known the circumstances
"to the U. S. Minister, as is most plainly
"to be seen. Mr. Twombly has at last gone
"himself to Peking to present his case to the
"Minister, to whom he has given the accounts
"that came under the head of those approved
"by the arbitrators.

"It is, however, plain to me that
"Prest. H. Fogg & Co have included in their
"claim all the thirty or more seperate
"accounts belonging to various shops which
"the arbitrators twice examined, and which
"those claimants have urged him to take
"the responsibility for. Of those accounts
"which I acknowledged at first, I have
"paid all; I have also paid over to the U.S.
"consul on account of the claimants, the
"sum of 21,170 taels, for which he gave me
"receipts. The firm of H. Fogg & Co acknowledge

the

"the receipt of about 15,000 taels, shewing a
"great difference in the amounts. Looking at
"the case carefully, it appears to me that the
"confusion has arisen from these merchants
"taking those accounts which were included
"in the list of those approved by the arbitrators,
"and putting the sums paid by me to the credit
"of the claims which I approved, to the credit
"of their other accounts, (now reduced by so
"much,) and of course leaving balances still
"due on account of those claims first approved,
"but paying in full those only approved by
"the arbitrators. This is like bringing flowers
"to cover up the wood, and is a clever scheme
"of theirs to mix and cover up their accounts.

"They say that they do not reckon
"interest, and then presently add in so much
"for seven years' interest; thus directly con-
"tradicting themselves, and making it as plain
"as need be that there are other points that
"disagree with the truth, and that they have
"made statements of whole cloth to suit
"themselves. There is evidence enow to show
"that the confusion in these accounts, which
"is brought forward to my reproach at this

late

"late day, is just a nice plan of theirs to
"get paid.

"The remark made in the N. S.
"Ministers dispatch before me, that these
"accounts are for articles used by the Chinese
"Government during the military operations
"against the Taiping rebels, and were in-
"dispensable for their success; that their amount
"is small and equity requires their payment,
"everything being for the use of the troops,
"and not for that of the Intendant; leads
"me to observe that the salaries of the foreign
"military officers, who led the Ever Vic-
"torious Force and drilled it to act against
"the rebels, with their rations and stores,
"altogether made a great sum. Everything
"was paid for to the minutest article, and
"vouchers exist for all accounts, large and
"small, and for their full payment, even
"to little sums.

"How much more reasonable
"would it be for me to urge the settlement
"of the moneys paid Ward and Beinson,
"of the cost of the arms, &c., ordered in Engl
"and of the disbursements for stores to the
foreig

"foreign shops, amounting in all to more
"than 400,000 Taels; which were raised by
"myself and Takee in one way and another,
"and advanced to meet the emergency
"and supply the wants of Government.

"Even to this day my door is
"crowded with debtors, some with claims
"unpaid, and some demanding the rest
"of their bills, for all of whom, unhappily,
"I have no means to send them off satisfied;
"where shall I get anything for this shadowy
"echo of a claim made up out of nothing,
"and added to besides with doubtful charges."

"The U.S. Consul entered into
"an agreement to pursue and settle the
"accounts connected with the advances
"made to Ward and Benson, and recover
"the balances; and now Messrs. A. Togg & Co
"are trying to get their claims placed among
"those which were allowed; but if Mr.
"Seward was ordered to reproduce the
"300,000 Taels and over paid to these two per-
"sons, it would not be difficult to adjust
"the accounts, and settle all the outstand-
"ing bills that were approved by the ar-

bitrators

"-bitrators. Hanbury and Cunningham.

"Further, the amounts given by
"the United States' Minister in his dispatch
"do not agree with the sums as given in
"the original bills; and I beg respectfully
"that my clear and particular reply showing
"this may be made known to the Foreign
"Office, and an answer sent to the American
"Legation, urging the Minister to require
"the U.S. Consul to recover the sums due
"by Ward and Benson, and to revise the
"accounts wrongly put among the approved
"accounts, and contrary to the agreement,
"between us, approving those that are just,
"and bringing this involved and muddled
"affair to a close."

I have also received a reply from
Tu, formerly Intendant of Circuit at
Shanghai, in which he says:—

"The various articles which were
"purchased from the foreign stores were all
"paid for in ready money at the time, as
"they were for the use of Government, and
"no credit on the accounts was given. When
"Wu was Intendant and had the management

of

"of the Force; the foreigners in it had their
"wages, and whatever stores were required
"to be purchased for their use through foreigners
"were all paid in ready money. The sums
"of 270,000 Taels paid Ward, and of 34,000 Taels
"and $ 78,000 or so paid Benson, are plain
"proofs of this. If the foreigners employed
"by the Government got things from the
"stores on credit, it was by arrangement
"between themselves; the shopkeepers should
"ask the parties who got them, it is plain,
"for the Chinese officials have nothing to
"do with those accounts. This principle is
"certainly well known. These accounts now
"brought forward by the storekeepers are
"all for goods obtained by the foreign soldiers;
"and We, by all that is equitable, need give
"himself no trouble about them. But con-
"sidering our friendly relations with other
"countries, and especially Gen'l Ward's
"services for China, the sums of about
"25,000 Taels and $ 16,000 which have been
"allowed and paid out of the accounts
"brought forward by the U. S. Consul, may
"be regarded as paid on account of humanity

and

"and patriotism. The accounts which were
"disallowed by the Intendant Wu, had,
"none of them, any evidence to support
"them; they were all brought forward
"by the merchants, and just therefore in
"the list of approved by the arbitrators,
"and this is the reason they are never done
"asking for them. In fact, it is like giving
"a man an inch and he asks an ell.

"Taking up now the case there
"brought forward, let me analyse it. The
"instructors employed at Shanghai in
"drilling the troops do not exceed, including
"British, French and all, more than a few
"scores of officers, each of whom is paid his
"wages monthly; if these latter have accounts
"at the stores, it is no concern of the Chinese
"Government; and the same rule applies
"to the Americans.

"When the Ever Victorious Force
"was employed, the accounts of their officers
"was a matter of no concern to the Intendant
"Wu. He was however unusually considerate
"and gracious, and in paying the accounts
"as far as he did at the time, he was

exceeding

"exceedingly generous to these strangers.
"Those other accounts can only be collected
"from the foreign officers and others who
"made the debts; and I would request
"that the U. S. Minister be answered
"that this is the way for Messrs. F. Fogg & Co
"to obtain their money. He can further be
"requested to enjoin the U. S. Consul at
"Shanghai to recover the great sums ad-
"vanced to Ward and Benson, and then
"the accounts can be balanced equitably
"and to general satisfaction."

From the above reports of the two Intendants in relation to this claim of Messrs. F. Fogg & Co, it is evident that they have mixed up their accounts with the money advanced to Gen. Ward in order to make it out that something is still due them. The first named (Wu) says that Ward and Benson took several myriads of dollars, for which they gave notes; and that the latter knowingly appropriated large sums of his funds, and this without any reason involved these storekeepers, and provided them;

and

and they have now brought up their accounts, as if for articles furnished to the Ever Victorious Force, in order to repay themselves. After looking carefully at all that the late Intendant says about the impossibility of paying this claim, it certainly seems to be a very confused and baseless account. The firm was swindled by Benson, and the U. S. Com did not carefully examine into the real facts at the time, but for once he heard only one side of the affair, and wrote to the Intendant that version which he had learned, desiring him to settle the account. I can come to no other conclusion after looking at every fact in the case.

I have accordingly had the three sets of accounts and letters copied for your Excellency's information, that you may by careful examination of them ascertain the truth; or as the proverb says, when the water falls the stones appear. From the day that military operations against the rebels began

and

and arms, ammunition, and other foreign stores were needed, (nobody knows how many, nor can their prices be all reckoned up,) no debts were allowed to be made or left unsettled.

At the time that Ward and Benson were connected with the Ever Victorious Force, they received these amounts spoken of (over 300,000 taels); and the money paid to the latter was on account of debts due to the storekeepers, just debts no doubt, which they must and ought to look to him for settlement. Those accounts which the Intendant Wu selected from the whole as being most reasonable, and stretched a point to pay them, were so settled because of the good relations existing between China and the United States; in doing that, he did all that could be expected of him, and where is the propriety of asking for the settlement of those other accounts, which are unreasonable and were rejected because they had been paid?

I see in the correspondence

that

that the U. S. Consul-General says, in a communication to the Intendant, that he has reported the whole matter to the Minister at Peking; this was before he went to America, and yet it would appear that he never laid it before you for examination. It seems as if he knew that the case was an unsound one, and after he had ascertained that he had been misinformed, he stopped doing more about it.

Messrs. H. Fogg & Co state that their accounts have been reduced by the payment of 15,000 taels; but Wu says he has paid over on account of storekeepers claims to Mr. Seward the sum of 21,000 taels and over. These two amounts do not agree, and the full investigation given shows that there is no real ground for this claim, and that it cannot be liquidated; there is therefore no special need for trying to find out where the discrepancy lies.

In sending this reply to your Excellency, I hope you will look at it

in

in a candid desire to get at the equity of the affair.

To His Excellency
Frederick F. Low
U. S. Minister to China -

Ack. 20 July

Exh

No 152 4 Enclosures

Legation of the United States
Peking May 7. 1872

Frederick F Low

to

Department of State

Subject

Protection of Portuguese residents at Foochow.

Encloses correspondence between the Portuguese and Consul De Lano. the Consuls despatch to the Minister, and the latters reply giving permission upon certain conditions.

No 152 — 4 Enclosures

Legation of the United States
Peking May 7 1872

Sir:-

The Consul at Foochow informs me that application has been made to him by the Portugese residents at that port to take them under his protection, and asks instructions as to the course he shall pursue. I have replied giving him permission to comply with the request of the Portugese, upon the express condition

Hon Hamilton Fish
Secretary of State

4.

conditions that the consent of the local Chinese authorities shall be first obtained.

The correspondence, copies of which are herewith enclosed, will inform you of all the particulars of the case.

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The protection and control of the citizens and subjects of non-treaty Powers in China is a delicate subject to deal with;- it throws upon diplomatic and consular officers grave responsibilities, and its proper management requires tact and judgement. I have however not deemed it advisable to withhold my sanction

in

in cases where our Consular officers express a willingness to respond to the appeals made to them, and where the sanction of the Chinese authorities can be obtained.

I may add that the recent discussion as to the proper manner of affording protection to Swiss citizens, and its final arrangement to the entire satisfaction of the Imperial Government, relieves this question of much embarrassment; it also furnishes a safe guide for the arrangement of such cases as they arise hereafter.

Trusting that my

action

action may receive the approval of the Department.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

Enclosures.

No 1 Mr De Lano to Mr Low
April 11. 1872

" 2 Mr Rozario & others to Mr De Lano
April 2. 1872

" 3 Mr De Lano to Mr Rozario & others
April 3. 1872

" 4 Mr Low to Mr De Lano
May 3. 1872

Enclosure No 1
Despatch " 152

No 21.

United States Consulate,
Foochow April 11, 1872.

Hon. Frederick F. Low,
United States Minister,
Peking.

Sir,

I have the honor to transmit herewith copy of correspondence between myself and the leading Portuguese residents at this port, which will explain itself. You will observe that I have consented to give them such consular aid as may be necessary to protect their interests until a Consul of their Country may be appointed, provided my action meets your approval.

I may say that the action meets with no opposition from the local Authorities of the port.

I have the honor to be,
Your obedient Servant,
(signed) M. M. de Lano
U. S. Consul.

Enclosure No 2
Despatch " 152

Copy.

Foochow April 2. 1872.

To M. M. De Lano Esq.
United States Consul,
Foochow.

Sir,

We the undersigned Portuguese residents at this Port, being without an official representative and without Consular protection, beg leave to place ourselves temporarily under your protection as Consul of the United States.

We may mention to you that Viscount S. Januario, lately arrived at Macao, has been empowered by H. M. F. Majesty, the King of Portugal, to negotiate a Treaty with His Imperial Majesty the Emperor of China on the same basis as those with other Foreign Powers.

We have addressed a petition to His Excellency the Governor of Macao, praying that he will solicit your protection

-tection for us. Pending his action, and
-until a representative of our Government
is duly appointed here, we beg you will
give us such consular protection as your
Government would approve of your giving
to the subjects of a Friendly Power.

We are, Sir,

Your obedient Servants,

signed. Dorindo de Rozario. Merchant
Alexandre A. Marçal. Publisher & printer
Sabino A. Marçal " printer
Francisco A. Gouvis "
Belmiro J. Pereira Book Keeper
Alexandre A da Silva " "

Enclosure No 3
Despatch " 152

Copy.

United States Consulate,
Foochow April 3. 1872.

Messrs. Rozario, Marçal, Pereira & others,
Portuguese residents,
Foochow.

Gentlemen,

I have had the honor to receive your communication of yesterday's date proposing to place yourselves temporarily under my protection as the Consular representative of the United States at this port. In reply I have to inform you that I shall at once refer the matter to the United States Minister at Peking, and pending his reply — there being no objections offered by the local authorities — I shall be pleased to give you such Consular protection as may become necessary to enable you to prosecute the legitimate business in which you are severally engaged.

Very Respectfully
M. M. De Lano
U. S. Consul.

Enclosure No 4
Despatch " 152

Legation of the United States,
Peking, May 5. 1872.

Sir,

Your despatch No 21, with its enclosures is received.

In reply I have to say that I can see no objection to your extending aid and protection to the subjects of Portugal resident at your port until such time as their own Government shall have provided other means for their protection. This, however, cannot be done in your capacity as American Consul except with the sanction of the Provincial Authorities.

My circular despatch concerning the protection of Swiss Citizens will indicate the course necessary to be pursued in managing the affairs of the subjects of non-treaty Powers. The two cases are unlike in this: I sought and obtained the consent of the Imperial Government

M. M. De Lano Esq.
U. S. Consul, Foochow.

Government that the Swiss might, if they elected so to do, be brought under the jurisdiction of American Consuls at all the ports in China; the Portuguese only ask it at Foochow. You will therefore make in regard to the latter a similar request to the Provincial Authorities of Fokien to that made by me to the Authorities in Peking for the former. The assumption of such duties is optional with yourself; if they are assumed your course of procedure, and your responsibilities so far as the Government of the United States is concerned, are clearly defined in Department Circular No 11 as modified by No 15.

I am, Sir,

Your obedient Servant,

(Sgd) Frederick F Low

Ex ack Adv approv July 24 to Pratt.

No 153 10 Enclosures

Legation of the United States
Peking May 10. 1872

Frederick F Low

to

Department of State

Subject

Contracts by which scholars attending Mission Schools are indentured.

Encloses copies of correspondence between the Vice Consul at Chefoo and Tsungli upon the subject: also instructions to the Vice Consul to the effect that such contracts cannot be enforced.

No 153 —— 10 Enclosures

Legation of the United States
Peking May 10 1872

Sir:-

I have the honor to
enclose copies and translations
of a correspondence between
the Vice Consul at Chefoo and
the Intendant (Toutai) concerning
certain contracts entered into by
and between the Revd Hunter
Corbett, an American mission-
-ary, and two Chinese, by which
the latter agreed that their
children

Hon Hamilton Fish
Secretary of State

children should attend the school under the supervision of Mr Corbett for a certain term of years. It appears that the parents who made the contracts violated them by taking their children from the school, whereupon Mr Corbett appealed to the Vice Consuls, who brought the matter to the attention of the Intendant and asked that the necessary steps be taken to compel the return of the scholars. The Intendant refused to take any action in the premises unless instructed so to do by his superiors in Peking. The Vice Consul

has

has referred the case to me for instructions. I have replied disapproving of his action, and informing him that the authority of the United States cannot be invoked to enforce such contracts.

Until this case was reported to me I was not aware that Protestant missionaries were making engagements of this nature with parents of their scholars. Subsequent enquiry however leads me to believe that this is not an exceptional case; on the contrary most of the Mission Schools have the pupils indentured to the managers for a specified term.

It

It seems clear that there are no provisions in the treaties upon which to base a demand for the fulfilment of such contracts when broken by the parents who made them. Were the Scholars taken away by the officials against the wish of their parents, in violation of engagements which their legal guardians had freely and voluntarily made, it might warrant the interference of the Consuls to prevent it. In the present instance it is not charged or intimated that the native officials interfered in any way. But if such

Contracts

contracts could be legally enforced, the policy of doing so would, I think, be more than questionable. The indenturing of children has been, and is, the universe practice indulged in by the managers of Romish asylums; it was one of the causes of irritation which culminated in the Tientsin massacre.

It is true that Chinese custom rather than law sanctions the indenturing (or sale) of children; and it is also true that such children are destined for the stage or other disreputable occupations. The practice

is

is reprobated by all respectable people, and the traffic is confined to the lowest class in society. When, therefore, it is known that native children are bound by contracts to the Superintendents of Mission Schools, instead of being credited with benevolent intentions they are almost certain to be charged with obtaining children for immoral purposes.

It is proper that I should say in this connection that the motives of those engaged in these educational enterprises are above suspicion; and it is not impossible that the

contracts

contracts in question tend to
the immediate advantage of
the Schools. But even if
this be true the prospective
injury to missionary operations
will, I feel certain, more than
overbalance any present benefit.
The practice is not warranted
by good policy and should
be discouraged.

I have, most respectfully,
to request the opinion of the
Department upon this question.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Enclosures

No 1 Mr Wilson to Mr Low
Apul 20. 1872

" 2 Mr Wilson to Toutai
Apul 3. 1872

" 3 Toutai to Mr Wilson
Apul 4. 1872

" 4 Mr Wilson to Toutai
Apil 7. 1872

" 5 Toutai to Mr Wilson
Apil 7. 1872

" 6 Mr Wilson to Toutai
Apil 8. 1872

" 7 Toutai to Mr Wilson
Apil 9. 1872

" 8 Copy of Contract Aug 9. 1867

" 9 do do do Aug 17. 1867

" 10 Mr Low to Mr Wilson
May 3. 1872

Enclosure No 1
Dispatch # 153

Vice Consulate of the United States,
Chefoo, 20th April 1872.

Sir,

I have the honor to enclose a copy of correspondence which has passed between me and the Taotai here concerning the breaking of contracts entered into by two Chinese subjects whereby they were to allow their daughters to remain for a certain specified time to be educated at the Mission school conducted by the Revd. Hunter Corbett. The case you will observe has been referred to Peking by the Taotai, you will also see by the last letter received that he wishes to have no further communication on the subject till he gets instructions from his superiors.

I have the honor to be
Sir
Your obedient Servant
(signed) Jas. Wilson
Vice Consul

To His Excellency T. F. Low
H. B. Minister &c.
Peking.

Enclosure, No 2
Despatch " 152

Copy of correspondence betwixt James Wilson
U.S. Vice Consul at Chefoo and Kung
Taotai concerning the non-fulfillment
of a contract entered into by Wang Tsing
Chong & Le See Yun to allow their daughters
to be educated at the Mission school
under the superintendence of the Revd
Hunter Corbett U.S. Citizen.

1 From James Wilson to the Taotai.

The writer has the honor to state
that the Revd Hunter Corbett makes a
representation to the effect that in the
sixth year of Tung Chih, Le See Yun
a native of the district of T'ung Loi and
Wang Tsing Chong a native of the district
of Wen Tung placed their daughters in the
foreign female school and signed agreements
that they were to remain for a fixed period
after which the daughters are to be married.
After remaining quietly in school for a
time both fathers furtively took away their
daughters contrary to the agreement. The

writer

writer is asked to see that Le See Yun and party are required to bring back their daughters and fulfil the agreement.

The writer would be obliged if the Honorable Taotai would instruct the Magistrates of the districts of Ping Loi and Wên Tung respectively to cause the daughters to return to the school and comply with the agreements.

Enclosed are copies of the agreements, which after examination please return.

Tsing Chih 11th. year, 2nd. month, 26th. day. 3rd. april 1872.

Enclosure No 3
Despatch " 153

2. From Taotai to James Wilson.

The writer has the honor to state that he received your communication yesterday enclosing the agreements of Lee See Yun a native of the Ning Lai district and Wang Tsin Chong of the district of Wen Tung, who in the 6th year of Tung Chih placed their daughters in the foreign female school and entered into an agreement with the Revd Hunter Corbett, that they were to remain for a definite period, and the additional information that before the expiration of the period both fathers furtively took away their daughters, and the request that Lee See Yun and party be required to bring them back and fulfil the agreement &c. &c.

All transactions between natives and foreigners should be in accordance with the Treaty. There is no clause in any of the various treaties referring to Chinese subjects placing their daughters in foreign female schools and entering into

into an agreement for a fixed period, after which the girls' family shall in consultation with the Church select husbands for their daughters.

The local official does not however dare to finally determine this matter, lest he should commit the crime of violating the Treaty. He will therefore refer this case to his superiors and when their instructions shall have been received he will communicate them.

Copies of the Articles of Agreement have been made, and placed on record, and the original copies shall be returned

2nd month 27th day

4th April 1872

P.S. Please take charge of the accompanying articles of agreement.

Enclosure No 4
Despatch # 153

3. From James Wilson to the Taotai.

The writer has the honor to state that your reply has been received in regard to the complaints of the Rev.d Hunter Corbett against Lee See Yun and party in which your honor states that if this case does not come under the Treaty you shall refer it to your superiors and report when their instructions shall have been received.

The writer has examined the 29.th Article of the Treaty signed at Tientsin and the 7.th Article of the additional Articles to the Treaty and finds that no distinction is made between males and females in regard to persons teaching and professing the Christian religion, how then can it be said that there is nothing in the treaty relating to girls entering mission schools.

The clause in the agreements requiring the parents to consult with the Church with reference to husbands for their daughters is inserted simply to

prevent

prevent their being married is worthless vagabonds. Surely it cannot be said that this affair cannot be settled because there is nothing in the treaty relating to it. How about the agreement entered into with the missionary in question?

The writer would call your Honor's attention to the 29th Article of the original treaty and the 7th of the additional Articles and respectfully request that your Hon. will protect the Missionary in his rights and especially cause Lee See Yun and party to bring back their daughters and fulfil the agreement.

Tung Chih 11th year 2nd month 30th day
7th April 1872.

Enclosure No 5
Dispatch # 153

4 From Taotai to James Wilson.

The writer has the honor to reply to your communication just received concerning Lee See Yun and party, in which his attention has been called to the 29th Article of the original Treaty and the 7th Article of the additional Articles to the Treaty &c. The writer has examined both Articles and finds that they are irrelative to the present case.

The writer has already referred this case to his superiors and will reply when their instructions have been received.

2d moon 30th day

7th April 1872.

Enclosure No 6
Dispatch # 153

5. From James Wilson to the Taotai.

The writer has the honor to state that he received your reply yesterday informing him that the case of Le See Yun and party does not come under the Treaty. The writer having carefully examined the treaty finds that Missionaries are entitled to protection and are not to be interfered with in the peaceful pursuit of their calling. There has evidently been interference in the case of Lee See Yun and party violating their agreements.

If your Honor wants to refer this case to your superiors and will not afford protection in the meanwhile the Missionary is in danger of suffering from still more interference.

The writer would urgently request that the agreements be fulfilled.

3d month 1st day
8th april 1872.

Enclosure No 7
Dispatch " 103

6. From Taotai to James Wilson.

The writer has the honor to reply to your communication received yesterday, in which you state that the original meaning of the Treaty is to afford protection to Missionaries and prevent interference, and that Lee See Yun and party by violating their agreements have manifestly interfered &c. &c.

All who peacefully pursue their calling whether teaching or professing the Christian religion, shall be protected by the local officials in accordance with the Treaty and shall not be interfered with. Your Honor by permitting the Revd. Hunter Corbett to receive the daughters of Chinese subjects into school and clandestinely make contracts that they are to remain for a fixed period after which the family are not left to their own desire, but must consult the Church about husbands, is not peacefully pursuing his calling. He is committing the crime not only of violating the Treaty but also of charging others with breaking

agreements

agreements and interfering with the rules of the Church. all of which is contrary to right.

Our mutual understanding of this case is not the same.

The honorable Consul should examine the 10th. Article of the Treaty with your Honorable Government concluded by your Honorable country's Minister Reed in the 8th. year of Heen Fung relating to the course Consuls should pursue in transacting business with local officials.

There is no occasion for more discussion at this time.

3d. month 2d. day

9th. April 1872.

Enclosure No 8
Dispatch No 152

[Translation.]

Evidence of an Agreement.

Wang Tsin Chang a native of the district of Wên Tsing desiring to have his second daughter Wang Ho, eight years of age, and third daughter Wang Ying, six years of age, study in the female Mission school under the supervision of Hunter Corbett, an American citizen. The latter agrees to provide food, clothing, teacher and all the necessaries for study without expense to the family of the girls. The second daughter is to remain for a period of seven years and the third daughter for a period of eight years, after which the girls family shall determine about the marriage of the girls to natives of their own country. The family shall however consult with the Church (i.e. the persons in charge of the school) as to the suitableness of the proposed husbands.

If after trial the girls should prove to be so to incorrigibly stupid that they are unable to learn or so proud that they will not obey the rules of the school,

the

the Church shall have the privilege of dismissing them.

This paper is drawn up lest hereafter there should be no evidence of the agreement.

(signed by) Wang T'ung, the Negotiater
Chong Kan chin, the Writer
Wang Tsin Chong, a party entering into the agreement

T'ung Chih 6 y. 7 mo.
(Aug. 9th 1867)

Enclosure No 9
Despatch " 153

[Translation.]

Evidence of an Agreement.

Le See Yun, a native of the district of P'ing Loi desiring to have his eldest daughter named Chuen, ten years of age and his second daughter named Hwan, eight years of age study in the female Mission school under the supervision of Hunter Corbett an American citizen, the latter agrees to provide food, clothing, teacher and all the necessaries for study without expense to the family of the girls. The eldest daughter is to remain for a period of seven years, and the second daughter for a period of nine years. After which the girls family shall determine about the marriage of the girls to natives of their own country. The family shall, however, consult with the Church as to the suitableness of the proposed husbands.

If after trial the girls should prove to be so incorrigibly stupid that they are unable to study or so fromd that they will

will not obey the rules of school the Church shall have the privilege of dismissing them.

This paper is drawn up lest hereafter there should be no evidence of the agreement.

(signed by) { Lee Lou Loo — Negotiator
Chong Kon Ching — the writer
Le See Yun — a party entering into the agreement

Tsung Chih 6th yr. 7th mo. 18th day
(August 17th 1867)

Enclosure No 10
Despatch " 153

Legation of the United States,
Peking, May 3d 1872.

Sir,

I am in receipt of your No— of the 20th ultimo enclosing copies of an agreement entered into by and between the Revd. W. Corbett and certain Chinese whereby it is stipulated that the children of the latter shall attend the school under the control of the former for a certain number of years, and of your correspondence with the Taotai in which he is requested to take such steps as may be necessary to compel a due performance of the contract on the part of the Chinese, together with his replies.

This is the first case of this nature that has been brought to my notice; nor was I aware before that Chinese children attending Protestant Missionary schools were indentured to the managers of the schools.

The question having been referred by

James Wilson Esq.,
H. B. M. Vice Consul, Chefoo.

by the Taotai to his superiors in Peking I deem it my duty, without waiting to hear from the Tsung-li Yamên, to say that such contracts are not warranted by good policy, nor can the treaties be appealed to to enforce their performance. A proper construction of the 29th Article of the Treaty of 1858 and the 7th Article of the supplementary treaty of 1868 does not contemplate the compulsory attendance at schools of Minors against the wish of their parents or guardians; nor can these Articles of the Treaties be invoked to enforce the performance of such contracts when broken by parents. It is, therefore, to be regretted that you should have made Mr. Corbett's case a subject of official correspondence with the Taotai.

If this case shall be brought to my attention by the Tsung-li Yamên I shall deem it my duty to say that your demand was made unadvisedly and is not sanctioned by me.

Whether, under the circumstances, it would be advisable to make known

known to the Taotai my opinions in advance, or wait until he shall learn the result from his superiors, I leave you to decide.

I am, Sir,

Your obedient Servant,

(Sgd) Frederick F Low

Encl
to Account
of Account

ack.

Gen. Catlin

DEPARTMENT RECEIVED JUL 22 1872 OF STATE

No 154

6 Enclosures

Legation of the United States
Peking May 11. 1872

Frederick F Low.

to

Department of State

Subject

Contingent Expenses of the Legation for the year 1871.

Encloses an account for the expenses for the year.

Sent to Sixth Auditor July 29-1872

No 154 6 Enclosures

Legation of the United States
Peking May 11. 1872

Sir:-

I have the honor to send herewith an account of the contingent expenses of this Legation for the year 1871. The larger portion of the account is included in the four vouchers enclosed. It was impracticable to obtain vouchers for the other items, hence they are embodied in the account itself. A certificate of the Sale of the

Hon Hamilton Fish draft
Secretary of State

draft on London also accompa-
-nies this.

The only item that may possibly need explanation is the cost of the Safe. Up to this time the Legation has been entirely destitute of any safe-guard against fire and robbers. By the closest economy enough has been saved out of last years allowance for contingent expenses to purchase a fire-proof safe, large enough to hold a portion of the more valuable papers of the Legation. The necessity of having such a thing will, I presume, not be questioned; nor do I expect that

that my action in procuring it will be disapproved. If however there should be any question as to this item in the account I desire to say that I will assume it, and take the risk of reimbursing myself from the sale of the safe when I leave the Legation.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Ack 22 July — dl Berdail

No 155

Legation of the United States
Peking May 18 1872
Frederick F Low
to
Department of State

Subject

Department despatch
No 73.

Acknowledges its receipt
with the enclosure.

No 155

Legation of the United States
Peking May 18. 1872

Sir:-

I have the honor to acknowledge the receipt of your No 73 of the 29th Feby enclosing copy of an instruction which had been sent by the Department to Mr Consul De Lano at Foochow.

I have the honor to be
Sir
Your obedient servant
Frederick F. Low

Hon Hamilton Fish
Secretary of State

Ent. To Bureau of Accounts

Acts

Mr. Pratt

DEPARTMENT OF STATE RECEIVED JUL 22 1872

No 156 One Enclosure

Legation of the United States
Peking May 20. 1872
Frederick F. Low
to
Department of State

Subject

Improvement of the Protestant Cemetery near Peking.

Advises of having drawn on the Department for £448 11/100, and encloses an account of its disbursement with the vouchers.

No 156 — One Enclosure

Legation of the United States
Peking May 20 1872

Sir:-

I have the honor to inform you that agreeably to the instruction contained in your No 70 of 12th February last I have drawn my draft on the Department under date of April 20. at 15 days sight for four hundred and forty eight 11/100 dollars gold ($448 11/100)

An account of the disbursement of the money and the Vouchers Hon Hamilton Fish are

Secretary of State

I are enclosed, also a certificate of the sale of the draft.

I have the honor to be
Sir
Your obedient servant
Frederick F. Low

Enclosure

No 1 An account of disbursements for improvement of Protestant Cemetery near Peking

Encl. Acd'd

No 157 Two Enclosures

Legation of the United States
Peking May 22. 1872
Frederick F. Low
to
Department of State

Subject.

Protection of Swiss Citizens in China.

Encloses correspondence with the Consul General upon the subject, and comments upon the arrangement made.

No 157 Two Enclosures

Legation of the United States
Peking May 22. 1872

Sir:-

I have the honor to enclose copy of a despatch recently received from this Consul General, together with my reply. From the tenor of Mr Sewards despatch it may be inferred that he thinks the instructions contained in my circular despatch to the Consuls concerning the protection

of

Hon Hamilton Fish
Secretary of State

of Swiss citizens (see enclosure No 5 in despatch No 147) clashes in some way with Department Circular No 15.

The arrangement made with Prince Kung for carrying into effect the instructions of the Department, though fixed and determined prior to the receipt of circular No 15 is, it seems to me, in entire accordance with your instructions. Instead of there being any clash between your views and my actions, the arrangement made carefully avoids the very difficulty which your second circular was evidently designed

designed to remedy. viz. — to
prevent our Consuls from
assuming to act for the
Government of Switzerland.

It did nevertheless
seem reasonable that the Swiss
Government intended to withdraw
its citizens from the protection
which France had extended
to them hitherto, and practically
leave them to be dealt with
by Chinese officials according
to native law and custom
without check or hindrance
except, possibly, the protests
of our Consuls when they
happened to witness cases of
gross injustice; nor was it
likely

likely that the Department contemplates any such state of things as the result of its instructions, ordering diplomatic and Consular officers to comply with the request which the Swiss Government had made. Such, however, would have been the practical result unless some convenient mode could be devised by which Swiss citizens residents in China could be granted exterritoriality. This the Chinese Government would not assent to unless they could be brought within Consular jurisdiction and placed

placed under Consular control; objection was also made to the exercise of Consular authority on behalf of non-treaty Powers. The Government was quite willing that our Consuls should ask for the citizens and subjects of non treaty Powers, but not as agents for those Governments. The plan agreed upon will, if properly conducted, fully and fairly accomplish all that could be desired; it also simplifies and makes plain the duties of Consuls, which will render complications practically impossible.

Heretofore

Heretofore this sort of protection has been afforded <u>in the armis</u>, without asking the consent of the Chinese Government. This is, so far as I know, the first instance where a definite method has been mutually agreed upon by which the citizens and Subjects of non treaty Powers could be placed under Consular protection with the free assent of the Imperial authorities. The understanding is just and reasonable, and is, altogether, a step in the right direction. I trust the

the Department will view
it in the same light and
give its sanction to what
has been done

I have the honor to be
Sir,
Your obedient Servant
Frederick F. Low

Enclosures

No 1 Mr Seward to Mr Low
April 24. 1872

No 2 Mr Low to Mr Seward
May 10 1872

Copy.

Enclosure No 1
Despatch " 157

No. 276.

United States Consulate General
Shanghai April 29th 1872

Honorable Frederick F. Low
United States Minister
Peking.

Sir:—

I have had the honor to receive your despatch of 17th April.

I judge from the reference made to the Department's Circular No. 11 that you have not seen Circular No. 15. I transmit a copy of the latter herewith, and request instructions whether I can assume any jurisdiction over Swiss Citizens.

I have the honor to be
Your Obedient Servant
(Signed) George F. Seward
Consul General

Enclosure No 2
Despatch No 157

Legation of the United States
Peking May 10th 1872

Sir:-

I am in receipt of your No. 276 with its enclosure.

In reply I have to say that Department Circular No. 15 was received after the arrangement had been definitely made between myself and Prince Kung with reference to the Swiss, and after the circular despatches to the Consuls had been prepared, but before they were sent.

The understanding arrived at between myself and the Prince seemed to be in entire accord with the last Circular - authorizing U. S. Consuls to afford protection to Swiss Citizens without becoming the agents of the Swiss Republic.

With reference to your enquiry - "whether I (you) can assume any jurisdiction over Swiss citizens" - I have Geo. F. Seward Esq. U. S. Consul Gen'l Shanghai.

have to say that you can, if the Swiss elect to place themselves under your protection. The assumption of extraordinary duties of this character is not compulsory; it is, however, not to be presumed that Consuls will decline to use their good offices for the protection of citizens of a Sister Republic when the request of such Government comes through the State Department.

In view of the fact that it is optional with the Swiss to place themselves under the jurisdiction of foreign Consuls, or not, and also to prevent complications with the local Chinese authorities, I suggested in my circular despatch of the 17th ultimo, that it would be advisable to open registers for such persons at the several Consulates, so that it might be definitely known who claim Consular protection, and who do not.

Consular protection in Christian countries is more nominal than real; in Oriental countries the case is entirely

entirely different. Unless subjects & citizens of foreign countries in China are brought under the jurisdiction of Consuls how are the latter to afford protection.s France has heretofore, treated the Swiss in China as French subjects. The government of Switzerland having elected to withdraw from that arrangement for reasons of its own, and having requested the Diplomatic and Consular officers of the United States to assume the duties heretofore exercised by those of France, it seemed in every respect desirable that some well defined mode should be fixed and agreed upon for extending the protection without the risk of complications with the Chinese Government. Unless this could be done, the change would prove disadvantagous to those directly interested, and the "protection" would be a delusion.

The plan agreed upon by Prince Kung and myself fully answers the purpose, it is also in harmony with the spirit and intent of Department Circular No. 15.

I

It is not unlikely that enquiries may be made of you concerning this subject by the Consuls; if so, it is desirable that you should be placed in a position to afford the information required. I, therefore, beg to enclose copies and translations of the material portions of the correspondence between myself and Prince Kung upon the subject. You are at liberty to furnish copies of this, and its enclosures to any of the Consuls who may desire them.

I am, Sir,
Your Obedient Servant
(Signed) Frederick F. Low

Ltr Peking June 24 acks 10 Pages

No 158

Legation of the United States
Peking, May 24. 1872
Frederick F. Low
to
Department of State

Subject

Treaty between China and Japan.

Reports the arrival at Tientsin of a new Mission for the purpose of amending the treaty negotiated last year.

No 158

Legation of the United States
Peking May 24. 1872

Sir:-

Some months since a report reached me through unofficial channels, that the Japanese Government was not likely to ratify the recently concluded Treaty between that country and China. Rumor had it that the second article, which vaguely provides for a defensive alliance between the two

Hon Hamilton Fish Secretary of State

Countries,

countries, was the chief objectionable features. It was also reported that the principal Ambassador, Prince Date, had been deprived of office and degraded for violating his instructions in the conduct of the negotiations.

Recently a new Mission has come to Yeddo for the purpose of reopening negotiations with a view of remodeling the treaty in whole or in part. The Envoy at its head has had several interviews with our Vice Consul, to whom he brought letters of introduction.

I

I am indebted to the Vice Consul for much interesting information concerning the movements and purposes of the Mission. From him I learn that the conceding of exterritoriality to Chinese residents in Japan, is the really objectionable provision in the treaty, although there are other provisions which the Japanese are anxious to have amended. Up to the last date from Tientsin the Japanese Envoy had not been accorded an interview by the Viceroy, who was the Plenipotentiary on the part

of

of his Government in the negotiations last year, although the presence of the Mission in Tientsin had been officially made known to him for a week or ten days. It is not impossible that the Viceroy would feel himself obliged to obtain authority from Peking before responding to the request for an interview, which may account for the delay which is, I am told, proving irksome to the Japanese.

In a conversation with one of the Ministers of the Yamen a short time since, allusion was made by me incidentally

incidentally, to the reported arrival of a new Mission from Japan. I was informed, in response to the suggestion, that it had been sent for the purpose of arranging the Commercial Rules and Regulations which are provided for in the Treaty. These Rules, he said, it had been decided to postpone formulating until after the treaty itself should have been passed upon by the two Governments interested. The impression sought to be conveyed by this reply evidently was, that the treaty had already been ratified. The reverse

is

is undoubtedly the fact.

If the objection is as stated by the Envoy, there is small chance of the Chinese Government being willing to make concessions which will make the treaty acceptable, unless Japan consents to exclude exterritoriality altogether from the treaty.

It has been the general impression for some time that Japan is anxious to relieve itself of the exterritoriality clauses in the various treaties between that Government and the Western Powers, and that an earnest effort would be made

made to that end when the treaties came up for revision. If such is the case it is only natural that such a clause in a treaty with China would be very objectionable at this time. That this, and not the alliance clause, is the objectionable feature seems probable; indeed the second article of the Japanese treaty varies very little in sense from the first article of our treaty of 1858 with China which never contemplated an alliance for any purpose.

This not unlikely that you may have fuller

and

and more reliable information concerning this subject from our Minister in Japan; if so you will be able to compare the reports from each country and a mean between the two will, most likely, approximate the actual facts. I shall continue to gather all the information possible concerning the negotiations as they progress, and should there be anything of public interest I shall not fail to report it.

I have the honor to be

Sir

Your obedient servant

Frederick F. Low

Cyl Ack. Copy to Navy Dep. July 24 Dis. to 26 July W. Pratt.

DEPARTMENT OF STATE RECEIVED JUL 22 1872

No 159 Two Enclosures

Legation of the United States
Peking May 27. 1872

Frederick F. Low

to

Department of State

Subject

Survey and Chart of a portion of the Inland Sea by an American vessel-of-war.

Encloses a letter from Mr Center, and copy of a notice cut from a Japan paper, going to show that the Chart is incorrect.

No 159 Two Enclosures

Legation of the United States
Peking May 27. 1872

Sir:-

With reference to the endorsement of Captain Ammen upon a letter of the Hon Secretary of the Navy, which formed an enclosure in your No 69, I have now the honor to enclose a letter received today from the Agents of the Pacific Mail Steam

Hon Hamilton Fish
Secretary of State

Steam Ship Company at Hiogo Japan, approved and endorsed by Capt Williams of the Steamer Costa Rica, also a copy of the "notice to mariners" to which allusion was made in my No 91. From the latter it will be seen that the coast line, as well as the rock, is incorrectly laid down on the American Chart.

I would respectfully suggest that steps be taken by the proper department to verify the correctness of Mr Brunton's information, and if found to be true, that the

the Chart in question be
withdrawn from circulation.
This is obvious that inaccurate
charts of straits and rocks
are worse than none at all.
The Government can, perhaps,
afford to leave the surveying
of these Coasts to other nations,
but no Country can afford to
publish charts which, instead
of being a guide and a
safeguard, are simply a
delusion, and snare to
Commerce,

I have the honor to be
Sir
Your obedient Servant
Frederick F. Low

Enclosures

No 1 Mr Center to Mr Low
May 9. 1872

No 2 "Notice to mariners", cut
from the Hiogo News of
August 5. 1871

Enclosure No 1
Despatch No 159

"Costa Rica"

Agency Pacific Mail Steam Ship Company.

Hiogo, May 9th 1872.

My dear Sir,

Your note of 20th ult. reached last Evg, & in accordance with your desire, send you a "Supplement" of the newspaper containing the "Notice to Mariners" referred to.

The "Pinnacle Royal Rock" has never been found by any of the Am. men of war, although search has been made for it. There is no doubt however of its existence for the Am. Str "Moneka" struck a couple of years ago, & the rock has been roughly surveyed & located by the English men of war.

Our Captains all have it on their charts issued by the British Admiralty. The "Monocacy" searched for it twice, but without success.

I trust this will give you the desired information.

Yours very truly

Wm F. F. Low.

Peking

Fully concur in the above

F. Williams N. Allen.

Consul Genl, "Costa Rica" &c.

Enclosure No 2
Despatch No 159

From Hiogo (Japan) News Aug 5. 1871

Notice to Mariners.

Akasi Straits Lighthouse.

As from certain discrepancies in the published charts, considerable difficulty may be experienced by Captains of vessels in approaching Akasi Straits from the Eastward during the night, the following is published for general information.

The Light on the North Point of Awadji shews round to N. 86 degrees E., and from a chart of Akasi Straits published in 1870 by the Hydrographic Office of the U.S. Navy, this bearing only clears a rock named on it "Boyd Rocks" about 2 cables.

The position of "Boyd Rocks," however, is placed on this chart half a mile too far to the southward, the coast line being also to the same extent in error.

The correct position of the rock is shewn on the chart of the Inland Sea published by the Hydrographer to the British Admiralty in 1861, being named on it "Siwo-ya," the "Princess Royal Rock" shewn on this chart having no existence.

Its position is also correctly shewn on the chart of Akasi Straits published by the British Admiralty last year, and it is named thereon "Hira-isa."

There is a clear space of about half a mile between the outside of the light and the rock, and vessels on passing it should not bring the light to bear southward of S. 78 deg. W.

This will lead clear of all danger, and in not less than 5 fathoms of water.

All bearings are true.

By order of the Minister of Public Works,

R. HENRY BRUNTON,
Engineer to the Government of Japan.

Lighthouse Establishment, Benten,
Yokohama, July 17th, 1871. o26

Cub. grant leave, provided public interests do not
interfere. July 22d Mr. Pratt
died 24 July

No 160

Legation of the United States
Peking May 30, 1872
Frederick F. Low
to
Department of State

Subject

Leave of absence to allow him to visit the United States.

Asks permission to return to the United States at the end of 1872 or beginning of 1873. and gives reasons for preferring the request.

No 160

Legation of the United States
Peking May 30. 1872

Sir:-

I have, most respectfully, to ask for a leave of absence, which will enable me to return to the United States the last of this year or in the early part of next. The date at which it will be found expedient and convenient for me to leave cannot now be fixed. The condition of the country, the business in hand, and the Hon Hamilton Fish state Secretary of State

State of my health would all
have to be taken into
consideration when determining
the time for my departure in
the event that I were allowed
to use my own discretion in
deciding the question.

My reasons for
preferring this request are
private as well as public,
although the latter are quite
sufficient to justify me in
making it. There are
several important and grave
questions concerning our
relations with this country
upon which a personal
consultation between the

Department

Department and myself, is very desirable, if not absolutely essential. And besides my private interests seem to require that I should give them attention for a short time. In addition to these considerations a change of climate once in three or four years seems necessary for the preservation of health, according to the experience of most foreign residents in China.

If my request should be favorably considered, I shall, provided it meets the sanction of the Department,

place

place the Legation in charge of Mr Williams during my absence, who will act as Chargé d' Affairs ad interim

I venture to hope that my request may meet the approval of the President and that his decision will be communicated to me at the earliest convenience of the Department.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low.

Adv Leg. to Ask. 2 Dec. Mr Pratt

Confidential

DEPARTMENT RECEIVED AUG 5 1872 OF STATE

No 161 Two Enclosures

Legation of the United States
Peking June 5. 1872
Frederick F Low
to
Department of State

Subject

Time of the setting aside of the Regency in China.

States that rumors are current as to the Emperor desire to ascend the throne this year; that it is favored by Prince Kung and opposed by the anti foreign party in the Capital.

14e

He also encloses translations of two Imperial Edicts which appear to have a bearing upon the subject of the reported disagreement between the Emperor and the Empress mother; and comments upon the probable effect of a change in the head of the Government upon foreign affairs.

Confidential

No 161 Two Enclosures

Legation of the United States

Peking June 5 1872

Sir:-

Reports are current among the better informed classes of a serious misunderstanding between the Empress Mother and the young Emperor growing out of a difference of opinion as to the proper time when the Regency shall be set aside and the Emperor ascend the Throne as Sovereign de facto

The

Hon Hamilton Fish

Secretary of State

The Emperor, it is said, desires the change to occur at or about the time of his marriage, in October next, while the Empress Mother strongly opposes any disturbance of the present status for some time yet. It is not probable that these antagonistic views are simply those of the Emperor and his mother; they undoubtedly represent the opinions of what foreigners generally denominate the pro and anti foreign parties in the Government. The former is supposed to be led by the Empress Dowager and Prince Kung; the latter by the Empress Mother and the high Ministers

ministers of which the late
Wojin was a type. The
Ministers of the Yamen are
reticent upon the subject; they
profess to have no knowledge
of the reports before alluded to.
The subject is however discussed
with freedom by the lower
officials, and the report is
generally believed by all classes.

As an evidence that
there is substantial foundation
for the reports, memorials are
being sent to the Throne by all
grades of officials who
sympathize with the Empress
-Mother, exhorting the Emperor
to a stricter observance of
filial

filial duty. The obvious meaning and intent of the Memorials is to counsel the Emperor against setting up his opinion in opposition to that of the Empress.

I have the honor to send herewith translations of two Edicts in response to Memorials of the kind alluded to. The first, you will observe, approves and commends the language of a Memorial; the second condemns, and orders punishment upon the author of another for his bold language. Why the second was issued in the names of the two Empresses

2/

Empress is not apparent, unless upon the supposition that their names would have greater weight and influence in putting a stop to the scandalous reports.

So far as the meagre information obtainable by foreigners about such matters will enable an opinion to be formed, it would appear that the position of the Empress Mother is approved of and commended by the officials and people generally. The chief argument adduced in support of it, (among themselves) is the assumed inability

of

of the Government to successfully meet some of the issues which are likely to be pressed by foreign nations when the Emperor attains his majority; hence they counsel delay until the Empire is better prepared to meet and resist, by force if necessary, certain demands, such as audience of the Emperor &c

If I am correct in supposing that the reported attitude of the Young Emperor has the sympathy and support of Prince Kung and the Ministry of the Yamên, and if they are successful in bringing him

pine forward in the Autumn
the Audience question, upon
which so much stress is
laid by most of the Treaty Powers,
may, I think, be considered
solved peacefully and satisfactorily.

Hitherto I have, in
common with my colleagues,
been of the opinion that the
Prince and his associates
were anxious to hold on to
the Regency as long as possible.
By so doing they would be
certain to retain place and
power, and postpone the
decision of embarrassing
questions which might bring
trouble. If the Prince

has

has changed front, and is now anxious to do away with the Regency, he must feel confident of his influence over the young Emperor which will enable those who now wield the power to retain the control. Were the Emperor to remain longer in retirement the Prince's changed retention of power might be lessened by the intrigues of enemies and the flattery of courtiers.

My faith is not robust that the Government will, in any event, consent to sudden and radical changes such as most foreign Governments would

would be glad to see. If, however, a change should take place in the nominal head of the Government without disturbing those who now compose the present Foreign office. I shall regard [redacted] the more as an important one, which will go far to guarantee a continuance of peace, and substantial progress so far as the interests of foreign nations are concerned. With a nominally responsible head the ministers will have more courage than is the case now.

I have the honor to be,

Sir,

Your Obedient Servant

Frederick F. Low

Enclosures

No 1 Imperial Edict
June 1. 1872

No 2 Imperial Edict
June 2. 1872

Enclosure No 1
Despatch " 161

Translation

Peking Gazette 1st June 1872.

Imperial Edict Sun yi ching, a Doctor of the Imperial Academy and Reader to the Emperor has presented to the throne a memorial in which he begs us to scrutinize and rectify our conduct in view of the calamitous sign soon to appear in the heavens.*

We have since our accession been in a constant state of watchful anxiety lest sooner or later We should be found remiss in some one of our duties; for our aim has been to maintain, in conjunction with our Ministers at Court, and elsewhere a rule of exalted justice over the Empire. But military operations have not yet ceased in the land, nor has the well being of the people been secured. This therefore is a period for the exercise

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* Reference is made to the Solar eclipse of June 6th 1872. Such phenomena are esteemed of evil omen by the Chinese.

exercise of caution both on the part of the Sovereign and His ministers. it is not a time suitable for relaxation and amusement. Furthermore the Solar eclipse to occur on the 1st of the 5th month (6th June) is a warning from Heaven which will all the more increase apprehension, and necessitate caution. The memorialist dwells on the importance of making the absolute fulfilment of filial duty the basis of our rule; that we be diligent in the performance of our administrative duties, encouraging the upright and discarding the unfaithful, and that we practice strict economy cutting off all unnecessary expenditure.

We have perused this memorial with unfeigned pleasure and fully approve of its sentiments. My Ministers at court or elsewhere should bestir themselves to a diligent and faithful performance of their public duties; so that we in common may be animated by the same ambition to govern well, and by such conduct encourage the blessings of Heaven & avoid its calamities. Respect this.

Enclosure No 2
Dechatch " 161

Translation

Peking Gazette 2nd " June 1872.

Imperial Edict. We have had the honor to receive from their Imperial majesties the Empress Dowager and the Empress mother an edict in language as follows:—

"On the 19th of this month (25th May) Hang-wei-chen, a Secretary of the court of representation presented a memorial to the Throne begging his Majesty to be more regardful of filial duty in order the more to find favor with Heaven and live in happy concord with their majesties the Empresses.

What bold language is this.' From His Majesty's infancy up to this time, during the 11 years he has occupied the throne he has been most faithful in his duties to ourselves. At all times his exercise of filial duty has been unchanged. That he has always been constant in the practice of filial duty any of the court Ministers can testify.

Hang-wei-chen in his memorial begs his Majesty in his relation to our-

selves

selves, to be more considerate, more
gentle in remonstrance, and less
indifferent to our wishes. The duty
of filial piety he says, is of vital
importance with the Sovereign. We
are at loss to find the aim of such
language as this. It appears to be
the ranting of one who has conjured
up something in his own mind
— language altogether false and evil.
Let Liu Wei-chen be handed over
to the proper board (Civil Office) for
the severest punishment.
His memorial is returned to him
with contempt.

Respect this.

Ent / recd 6 Aug

DEPARTMENT OF STATE RECEIVED AUG 5 1872

Mr. Platt

No 162 H. Enclosures

Legation of the United States
Peking June 8. 1872
Frederick F. Low
to
Department of State

Subject

Seizure and forcible detention of a number of children when on their way through Chinkiang to a Roman Catholic Asylum at Nanking.

Encloses copies of Correspondence with the Consul and the officers of the

the Navy as to the measures to be adopted in case an outbreak should seem probable.

No 162 4 Enclosures

Legation of the United States
Peking June 8. 1872

Sir:-

I have the honor to enclose copies of a dispatch from the Consul at Chinkiang, and my reply, also letter from me to the Senior commanding Officer of the Navy at Shanghai and the Admiral, with reference to a threatened outbreak at Chinkiang. The Consuls dispatch contains substantially all

Hon Hamilton Fish
Secretary of State

all the information I have upon the subject up to the present moment.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Enclosures

No 1 Mr Flint to Mr Low,
May 25, 1872

No 2 Mr Low to Mr Flint,
June 6, 1872

No 3 Mr Low to Senior Comdg
Offices US N. Shanghai, June 5/72

No 4 Mr Low to Admiral Jenkins.
June 5, 1872

Copy

Enclosure No 1
Despatch # 162

No. 8

United States Consulate
Chinkiang May 25 1872

Sir.

I have the honor to report to you that on the 20th instant while some Chinese children from a Catholic Mission at Yang Chow (twelve miles north of this city) were being sent in a boat through this city enroute for a Mission school # a hundred miles below upon the grand canal, the boat was attacked, or a trouble arose in some way between the boatmen and some persons on shore, and the people found out that these children, some forty in number, were on board, and the populace demanded them. Soon however, the children and boatmen were sent to the Hsien's Yamen, and there was quite a tumult. Pere Messer of the French Catholic Mission here on being informed of the fact spoke to the English Consular Agent here Honorable Frederick F. Low whom United States Minister, Peking.

#1000-si

whom he met on the street, and was advised not to go to the Hsien's Yamen, but did go, but he was taken from his chair, and had to be secreted in the Yamen for protection — at night he was sent out of the native city to his home, by the Hsien, through one of the water gates.

The Hsien states that he had great difficulty in restraining the people, and that there was great danger of a serious riot.

The children and boatmen are detained the former at the native orphanage (Chinese) and the latter at the Hsien's. They dare not be sent away for fear of the people who are incensed against them for aiding foreigners in taking away the children. For the present we have advised the Hsien not to endanger the lives of foreigners by sending the children through the city, hence they are still under his charge, and we also gave him to understand that the boatmen must not be punished, simply because they were in foreign employ, when no charge was brought against them.

The

The Catholic Mission here is quite urgent in demanding the immediate return of the children, and under the circumstances, I think their demands impolitic, although they undoubtedly are right in expecting their return, still from the peculiar circumstances, the consuls have thought best to advise a cautious course of action.

The Taotai is absent from the city and the present Asien is most incompetent. As I have already stated in a private note, this place is quite subject to these tumults, and on this account and the prejudices of the people here these small troubles become of more importance than they otherwise would. At present I see no danger of further difficulty, but the state of feeling that exists here renders it possible for troubles to arise at any time. I have noticed the prejudices of the Chinese against foreigners of late manifested by the covering up of the eyes of their children upon

upon the approach of foreigners, and among the common people there is the too common story that these children in charge of the Catholic Mission are to have their eyes taken out &c.

As far as I can learn at present I think with proper caution on the part of the Mission at Yang Chow these children might have been sent in a smaller number, or in such a way as not to have aroused the prejudices of the people, and it is extremely unfortunate that such events as these are so common where these Missions are established.

Another great error is made by the too common way of the members of these Missions claiming a sort of official position and going to the native officials when no foreigners are allowed such privileges except through the Consuls. This late trouble was largely increased by the visit of Pere Messer to the Yamên when the populace was already excited. The stories

about

about Lientsin are heard again among all classes, as well as the Yang Chow difficulties heretofore.

There is also the rumor that a portion of the Northern Chinese Army has lately been disbanded, and that some of these men have come to Yang Chow with the intention of robbing from the salt establishments there, and from the circumstantial evidence I have received it is quite probable, and this may add to our difficulties in the future.

I am, Sir,
Your obedient Servant
(Signed) Thomas Flint
Consul

Enclosure No 2
Despatch " 162

Legation of the United States
Peking June 6. 1872

Sir:-

I am in receipt of your No 8 of 25th ultimo.

If caution be practiced by the Romish Missionaries, and the officials are honest and efficient, it is probable that your place will escape a repetition of the scenes enacted at Tientsin in 1870. Like causes however are apt to produce similar results, and I shall not feel sure you are entirely ~~safe~~ free from danger for some time yet.

Enclosed I beg to hand you copy of a letter which I have addressed to the Senior Commanding Officer U.S. Navy
Weston Flint Esq
U S Consul, Chinkiang

Navy Shanghai. I have also written to the Admiral suggesting the propriety of keeping a vessel on the Yangtzy between Chinkiang and Hankow permanently.

If it should appear that disorder is probable you will lose no time in making the facts known to the Senior officer of the Navy, Shanghai.

You will also impress upon all who consult you the necessity of extreme caution, as the slightest irritation now might lead to results that would be deplorable.

I am, Sir,

Your obedient Servant

(Sgd) Frederick F. Low

Enclosure No 3
Despatch " 162

Legation of the United States
Peking 5th June 1872

To
The Senior Commanding officer of
the U. S. Navy, Shanghai:
Sir:-

The Consul at Chinkiang reports an occurrence at that port recently which has greatly excited the populace, and although he does not anticipate serious trouble, it is not impossible that riotous demonstrations may be made which will endanger the lives and property of foriegners. If there should be serious reason to fear an outbreak I have instructed the Consul to apprize you through the Vice Consul General of all the material facts; and if it should appear that there is real danger to life or property, I have to request that you will take measures to afford the protection needed until instructions can be received from

the

the Admiral. This request is based upon the presumption that you are invested with discretionary power which will enable you to meet any sudden emergency that may arise at or near Shanghai.

A copy of this goes to the Admiral by to day's mail.

I am, Sir,

Your obedient Servant

(Signed) Frederick F. Low

Enclosure No 4
Despatch # 162

Legation of the United States
Peking June 5th 1872.

Admiral:-

I have the honor to enclose copy of a letter addressed to the Senior Commanding officer Shanghai.

The necessity for action on the part of the Navy will, I trust, not occur. If however it does, and a vessel should be sent to Chinkiang without first obtaining instructions from you, it is to be hoped you will sanction the proceeding.

The apprehensions of disorder at Chinkiang arise from an emeute not long since between some boatmen and the people. The former were conveying a number of children from Yang Chow to a Catholic orphan asylum located at Woo-si, about one hundred miles from Chinkiang and

Rear Admiral
Thornton A Jenkins
Comdg in Chief Asiatic Fleet.

and when passing through the latter place the boats were seized and the children forcibly taken out and placed in a native Asylum. The boatmen either were taken to the Yamên of the District Magistrate as prisoners or they sought refuge there from the fury of the mob. A French Priest who went to the Magistrate's Yamên to intercede for the boatmen and to reclaim the children was, I hear, roughly handled and narrowly escaped serious injury at the hands of the populace. At last accounts the children were still in the native Asylum and the boatmen in the Yamên. The Consul thinks that with prudence serious trouble may be avoided; although there is considerable excitement which may not be allayed for some time.

The Tientsin Massacre can I think be traced to causes similar to those above reported, which makes me feel more anxious about this affair than I otherwise should.

And this leads me to enquire whether

whether in view of the vast commercial interests on the Yangtsze river, and the immense preponderance of the carrying trade being carried on under our flag, your present force of light draught vessels might not permit of one being constantly stationed on that river between Chinkiang and Hankow, whenever the services of all are not needed elsewhere.

I have the honor to be, Admiral,
Your obedient Servant
(Signed) Frederick F. Low

P. S. If I am not misinformed the draught of water in the Yangtsze will render it safe for either the Monocacy, Ashuelot, or Saco to go to Hankow at any season of the year, Commander McCrea's report last year to the contrary notwithstanding.

F. F. L.

Mr Rad.

Ack'd 6 Aug

No 163

Legation of the United States
Peking June 12. 1872
Frederick F. Low
to
Department of State

Subject

Reception of Department
despatches 74. 75. 76 and 77
Thanks the Dept for copies of
correspondence on Alabama claims.
Reports having sent Mr Rose's
certificate of appointment to Hankow,
and returns thanks for Mr Williams to Dept.

No 163

Legation of the United States
Peking June 12. 1872

Sir:-

I have the honor to acknowledge the reception of Department despatches numbered 74. 75. 76 and 77. For the enclosures in your No 74 I beg specially to thank you. These papers throw much additional light upon a question, which has, for the past few months, been a subject of earnest, and Hon Hamilton Fish sometimes Secretary of State

sometimes intemperate discussion by the people and press of the two nations nations directly interested, wherever located. Even in China such discussions have not been less earnest than at home. The latest information we have by telegraph is to the effect that a new article has been added to the Treaty of Washington which it is understood settles the points of difference which have been the subject of recent correspondence; and that the arbitration at Geneva will now proceed without further interruption.

If the final result
of the arbitration shall be the
peaceful and equitable
settlement of the questions at
issue between the United States
and Great Britain, great credit
will be due to the President
and his Cabinet advisers for
bringing to such a happy
termination a controversy,
which might properly be
considered a constant menace
to the peace of the great nations.

In the absence of
Mr Rose, who is temporarily
away on leave, his certificate
of appointment has been sent
to his superior, the Governor

at

at Hankow.

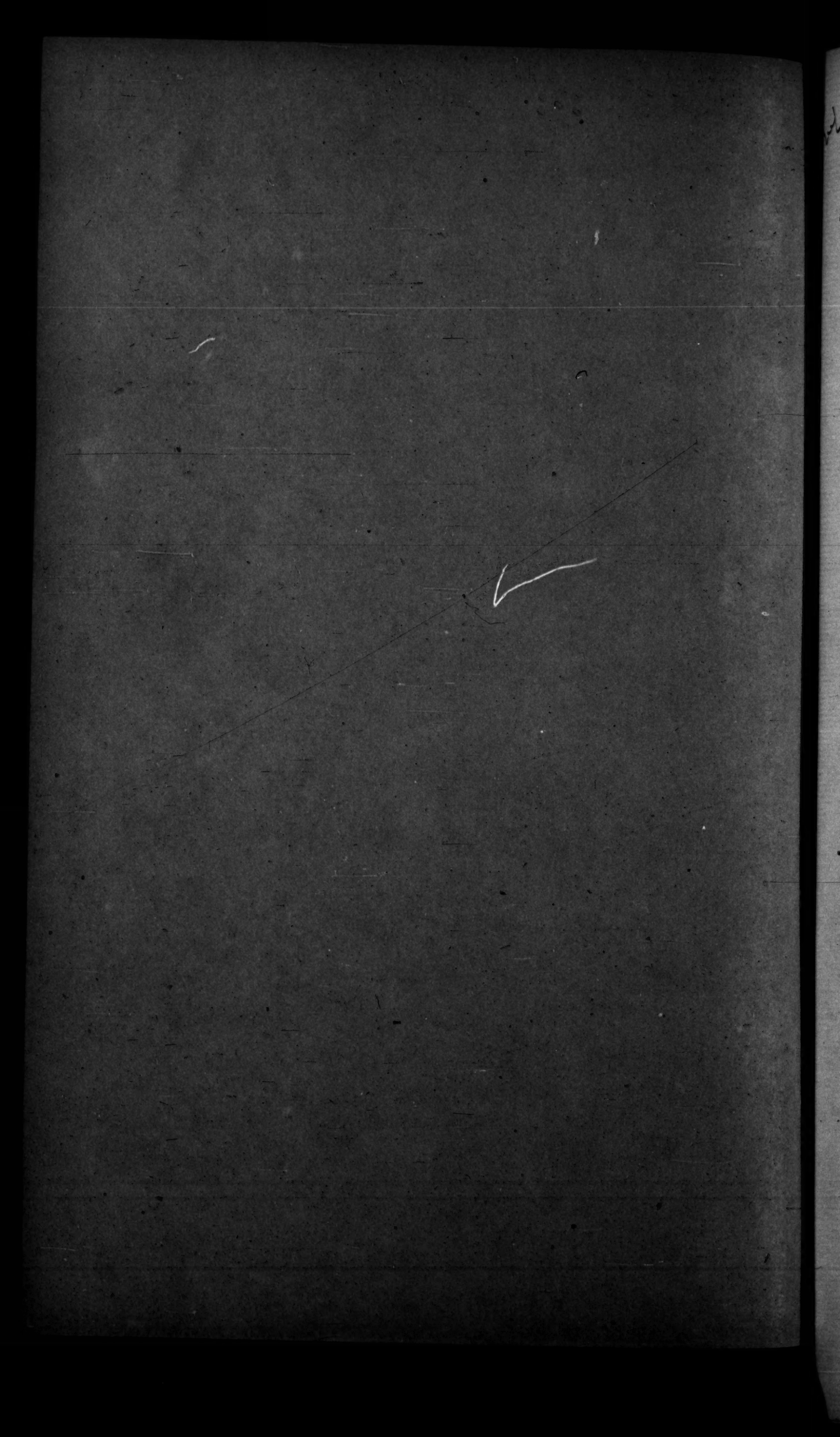
The decease of Mr Williams since his nomination was sent to the Department, renders his appointment void, therefore it is returned herewith.

I have the honor to be,

Sir,

Your Obedient Servant

Frederick F. Low



Mr Adee 6 Aug

Mr Pratt

DEPARTMENT OF STATE
RECEIVED
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1872

No 164

Legation of the United States
Peking June 13. 1872
Frederick F Low
to
Department of State

Subject

Instruction contained in Department dispatch No 77 74.
States that the views of Department will be made known to Prince Kung at the first convenient opportunity

No 164

Legation of the United States
Peking June 13. 1872

Sir:-

I have carefully noted the observations contained in your No 77/74 upon the relations and duties of China and Corea.

The subject will again be brought to the attention of Prince Kung at the first convenient opportunity, when the views of the Department will be fully and unequivocally made known to him. I am, sir,

Your obedient Servant
Frederick F. Low

Hon Hamilton Fish
Secretary of State

Mr Conner to examine subject upon the depository of the
Enl. indentures — Oct 14
See No 177 in connection with this
W Pratt
to Mr O'Connor

DEPARTMENT RECEIVED AUG 23 1872 OF STATE

Acknl 4 Jany No 179

No 165 Four Enclosures

Legation of the United States
Peking June 20 1872

Frederick F Low

to

Department of State

See also No 177
Mr Low will be
requested to make
to me a report
thereon

Subject:

Indentiuring of Children
to the managers of Protestant
Mission Schools.

Encloses correspondence with
Chefoo Vice Consul upon the subject,
and asks for a decision of
the question by the Department.

No 165 Four Enclosures

Sir:

Referring to my No 155 of 10th ultimo I have now the honor to enclose copies of some additional correspondence with the Vice Consul at Chefoo with reference to the same subject, — indenturing of native children to the managers of Mission Schools.

The views of the Missionaries as to the necessity of such contracts are, I think, fairly

Hon Hamilton Fish
Secretary of State

fairly stated in Mr Maters note; (enclosure N°3) and my opinions concerning the whole question are given at some length in the despatch to the Chefoo Vice Consul. (enclosure No 4) This particular case does not seem of sufficient consequence to justify me in bringing it to the your notice. There is, however, an important principle involved, concerning which it seems very desirable that an authoritative and definite decision should be made without delay.

In view of this I have, most respectfully, to request that

that the Department will consider the question and give me the benefit of its opinion as early as may be convenient.

I have the honor to be
Sir
Your obedient servant
Frederick F. Low

Enclosures

1 Mr Wilson to Mr Low
June 3. 1872

2 Mr McCartee to Mr Corbett
May 23. 1872

3 Mr Maleer to Mr Corbett
May 20 1872

4 Mr Low to Mr Wilson
June 20 1872

Copy

Despatch No 165 - Enclosure No 1

Chefoo 3rd June 1872

My dear Mr. Low:—

x x x x x x x x x x

x x x x x x x x x x

I have heard nothing from the Taotai as yet about Corbett's case. Herewith I send you a letter which he received from Mr. McCartee on the subject. Kindly return it after perusal. I also enclose a note from Mr. Mateer.

Yours very truly

(Signed) Jas. Wilson

Copy

Despatch No 165 Enclosure No 2

Shanghai 23rd May 1872

The Rev H. Corbett

Chefoo

My dear Mr. Corbett.

Mr. C. H. Mateer has handed me your note with reference to the custom of requiring the parents of children placed in the Mission Boarding Schools, to indenture them for a term of years: and you ask Mr. Mateer to make inquiries and suggested that "perhaps Rev. Mr. McCartee "may be able to give you some information as he has had a good deal of "experience as Consul and in schools."

You quote apparently from an official letter from the United States Minister to the Consul at Chefoo in which His Excellency is reported as saying that he "was not aware "that it was the custom or ever practiced of parents indenturing their "children to the Superintendents of Mission schools"---"that this is not sound "policy and the treaty will not bear it out

"out not enforce the carrying out of such
"agreements". From these remarks
attributed to the Minister, I cannot
resist the impression that the sub-
ject has not been represented to His Ex-
cellency as clearly as might be desired.
I shall be most happy if I can succeed
in throwing any light upon the subject,
and still more pleased if the knowledge
of my long residence in China, and
the favorable notice the previous ministers
from Co.ⁿ Marshall to Mr. Burlingame
have been pleased to take of my services
as a Consular officer, should endure
Governor Low to attach any weight to
my remarks.
In the first place, it has always been
customary among Protestant Missionaries
at Ningpo and Shanghai, in the cases
of applicants for admission to the Mis-
sion Boarding Schools, to take them on
trial for three to six months or longer, and
then, if in the meantime the pupil had
given promise of scholarship and good
behavior, to allow the parent or guardian
to execute a paper binding him so to self-

to

to refund the expenses of the pupils food and clothing in case he saw fit to take the child away from the school before the specified number of years had expired. I say allowed, because the parents have generally been anxious to do it, inasmuch as it enables them to set their minds at rest with reference to the support and education of their children. and because it has been customary to give an outfit to the pupils upon their marriage in case of girls, or on their leaving school in case of boys. The paper signed by the parent will not hold the child to labor &c, but is quite analagous to and called by the same name as the indenture given to the teacher or professor by the parents of advanced (Chinese) pupils who are to be prepared by the teacher for the literary examinations. I enclose a copy of these indentures (called 關書 or 關約) with a translation of each.

2nd I have never heard from the Chinese officers or people any complaint against the Custom.

It

It seems perfectly fair to prevent depraved and unprincipled persons from abusing the kindness of charitable people by allowing them to support their children until the parent can sell or otherwise dispose of the young persons to the pecuniary emolument of the wicked and unnatural parent and the instrument merely binds the parent to do, what he would otherwise be bound by the laws of all civilized countries to do - viz - to support his own children in case he chooses to withdraw them from the guardianship and instruction of the Missionaries, of whom very few could be found willing to undertake the trouble and expense of feeding, clothing and instructing girls, for example who at any time might be taken from them and sold as courtezans &c.

3rd I have heard complaints made against the Sisters of Charity because they did not draw up indentures for the children brought to them — the indenture being considered a guarantee in the place of the Protestant schools that the children will be returned to their parents, when the term specified has expired.

expired — whereas it is said that the Roman Catholics do not make use of indentures and do not return the children to their parents.

In view of these facts I would respectfully submit to His Excellency that the contract or indenture referred to appears to be a fair and equitable one to all the parties concerned, and quite in accordance with the established practice of the Chinese themselves.

I have written the above statement in response to your request hurriedly under the pressure of unusual engagements, as I have been suddenly called upon to discharge the duties of Interpreter to the U. S. Consulate General, the gentleman who recently acted in that capacity having been as suddenly called upon by his superior officer (the Austrian Consul General) to go to Siam. On reading what I had thus far written I find that I have omitted to state that there is also a third kind of 關書 in common use in China, and that is an Apprentice's Indenture of which I also send a copy with a translation.

J

I think it might be respectfully suggested to H. Excellency, that it would hardly be considered improper to enforce such a contract or indenture, in the case, for example, of a young Chinese apprenticed to an American citizen to be taught the art and trade of a watch maker or an optician - and it appears to me that an analogy can be pleaded in favor of the school indentures, inasmuch as the practice has the sanction of custom long established both in China and in the United States.

I remain

Very sincerely Yours

(Signed) W. B. McCartee

Copy

Despatch No 165 Enclosure No 3

Shanghai May 23. 1872

Dear bro Corbett.—

I sent your note speaking of the invalidity of Mr. Low's view of the invalidity of your school indentures to Mr. McCartee knowing that his experience in China, and knowledge of what has been done in the past in such cases would enable him to speak intelligently on the subject. He has written you a letter himself telling you what he knows on the subject. For my own part I was very greatly surprised at the position Mr. Low takes and altogether at a loss to account for it. It seems to me that Mr Low must be misinformed as to the nature of the contract entered into in such cases, or your indentures must be very different from those usual in such circumstances. I cannot imagine on what possible grounds the indentures given for the boys in my school in Tung Chow should be pronounced invalid. They are precisely similar in their nature to those made when boys

learn

learn a trade. Contracts made in the coolie trade are I know illegal - but it is because the trade is itself illegal. Schools certainly are not illegal. Besides these indentures are not contracts to labor. On the other hand the advantage is all on the parents side. The indenture is simply a precaution to prevent the abuse of the charity and nothing else will serve the purpose. Without them we would always be liable to lose the good of the foundation laid while the child was small by the parent taking the child away as soon as he is old enough to earn something, or in case of a girl old enough to sell. In Ling Chow I have not yet had occasion to test the legality of the indenture, but in at least four cases the money has been refunded, when the parent wished the child to leave school, and the Chinese have never questioned in the least the validity of the indenture. In one or two cases I have waived the claim because the boy was unsatisfactory, and did not himself wish to stay. Last fall an attempt

was

was made to take a girl by force from Mr. Farnham's school. He applied to the Consul General who laid the case before the Chinese officers and Mr. Farnhams claims was fully allowed. Whether Mr. Farnham did subsequently see fit to enforce it, I do not know. Certainly there might be times when it would not be best to enforce it and most Missionaries would have sufficient judgement in such cases. This however does not affect the legality of the indenture. Without this indenture it seems to me that Mission Boarding Schools might as well be shut up. They will only offer an open door for designing men to abuse the charity of the Christian Church. I have spent a deal of time and strength on my school and I should be very sorry indeed to see it decided by our officers and proclaimed to the Chinese that all such indentures are void. It would I fear be a death blow to stability or anything like high attainment in our schools. If there be objectionable provisions in these indentures let them be removed, but by no means

let

let the indenture itself be declared invalid. I am making indentures here for all who come to learn printing. are these also to be declared invalid? I hope you will lay the matter fairly and fully before Mr. Low that there may be no misunderstanding.

Yours fraternally

(Signed) C. H. Mateer

Despatch No 165 Enclosures No 4

Legation of the United States

Peking June 20 1872.

Sir:

Your unofficial note of 3rd inst, enclosing one each from Mr. McCartee and Mr. Mateer to the Rev. Mr. Corbett, is received.

The correctness of my views as expressed in a despatch to you concerning the validity of indentures appears to be questioned by the writers of the two notes before referred to, and I am requested to review my decision in the light of the additional information furnished.

All the papers you sent have been examined with care and the arguments therein contained have received due consideration.

The facts of the case upon which my decision was based were as follows,— Mr. Corbett entered into contracts with certain Chinese by James Wilson Esq. which

U. S. Consul Chefoo.

which the latter agreed to place their children under the care and control of the former for a certain number of years, to be educated in the Mission School. Before the term mentioned in the contracts had expired the children were taken away by the parents who made the indentures. Mr. Corbett complained, through you as Vice Consul of the United States, to the Taotai that the contract had been violated, and requested that official to compel the specific performance of its terms by the parties who made it.

This the Taotai declined to do, unless so instructed by his superiors at Peking. Thereupon you submitted to me copies of the contracts in question and your correspondence with the Taotai for my information and decision. In reply you were informed that the contracts in question "are not warranted by "good policy, nor can the treaties

be

"be appealed to to enforce their
"performance."

I see no reason to modify or alter that decision; on the contrary further investigation only tends to confirm me in the opinion I had formed. The precedents cited by Mr. McCartee and his arguments appear to have no bearing upon the case in question. In the cases cited where it is alleged that the Consul-General complained to the officials at Shanghai and recovered damages, the contracts were evidently unlike those of Mr. Corbett. I have not decided, nor do I now decide, that when a specific sum as liquidated damages is mentioned in the contract to be paid by the party violating its provisions, a legal claim cannot be made to recover it under and by virtue of the XXIV Article of the treaty of 1858. No such case has come to me yet; and I might with propriety decline to consider the subject further than is necessary for

for a decision of the particular case which was referred to me. But as the subject seems to have excited considerable interest among the Missionary body and as indentures appear to be considered of vital importance to the success of the Mission Schools it is perhaps advisable that you should be placed in possession of my opinions concerning the whole question.

Of the benevolent intentions of the Missionaries in their efforts to extend to the Chinese the benefits of education there can be no doubt; nor do I question their statements that such contracts of Indenture contribute to the permanency of the schools and the practical advantage of the scholars. These are moral considerations which would go far to justify the making of contracts of this nature, were there no legal objections. But when it is sought to compel a specific performance of such contracts on the part of the Chinese

the

the Consuls and the Minister can only appeal to treaty and well settled principles of public law.

The rights and privileges of all foreigners in China are supposed to be defined in the treaties. All rights not granted by treaty must be considered withheld.

If an appeal be made to the treaties to sustain the validity of indentures, by which minors are bound to the Superintendents of foreign schools, where will the authority be found?

I am free to say that I am unable to find any. In the case of apprentices cited by Mr. Nature, it is possible that the XIII and XIV Articles of the British, and the XVII Article of the American treaties of 1858 might cover it. Such persons might be considered as "hired" or "employed", but school children could hardly be said to come within such a definition. Nor does the VIII (^ VII) Article of the Supplementary treaty of 1868, which stipulates that schools

may

may "be freely established and
"maintained within the Empire of
"China at those places where foreigners
"are permitted to reside", legalize in
any manner coercive measures to
compel the attendance of Chinese
youths upon such schools when
once established.

Even if it be true as Dr. McCartee
affirms that among the Chinese
indentures are common, and their
validity is sustained by local law
and custom, it does not follow
that such contracts between natives
and foreigners are legal instruments.

It is currently reported and
generally believed by foreigners that
the purchase and sale of children
is not uncommon among the poor
and disreputable classes, and, although
the practice is condemned by the
better classes, still the validity
of such sales appears to be
sanctioned by custom or law, or
both. It is intimated by both
Dr. McCartee and Mr. Mateer that
such

such a practice does obtain among the common people. If the Chinese law or custom can be pleaded to sustain the validity of indentures, is it not possible that people less scrupulous than the Missionaries might go a step farther and purchase children and ask to be protected in their rights.

The charge of buying or kidnapping children is the usual one brought against foreigners by the evil disposed to inflame the passions of the people, and incite riots. It is painfully apparent that much of the hostility of the people to the Romish Missions arises from the fact that their orphanages afford plausible grounds for the ill disposed to charge that the children have been obtained by purchase or kidnapping. In view of this ought not Protestant Missions to avoid everything which will afford the least excuse for making similar charges against them.

In

In this connection I would observe that Dr. McCartee is, I think, not quite correct when he says that the Roman Catholics do not make use of indentures. In one large institution that I have some knowledge of, all the children are indentured to a native Gate Keeper. In reply to an enquiry why this was so, my informant said that this expedient had been resorted to, because the Chinese officials would not concede the validity of indentures if made to foreigners.

To sum up the whole question in brief, there is, so far as I can see, no warrant in the treaty for such contracts between foreigners and natives. And even if there were, I should seriously question the policy of Protestant Missionaries availing themselves of it at present.

Were indentures abolished, it is not unlikely the schools would temporarily suffer. But every if they should

should will not the gain to the whole
Missionary Cause be more than
sufficient to compensate for the
loss! I think it would.

But whether it be so or not, the
law seems to me so plain as to
admit of no difference of opinion,
and leaves no option to the Consul
or Minister when appealed to for
his decision.

There may be honest differences
of opinion as to the policy of
abandoning indentures whether
legal or not. The managers
of the schools may still think
it advisable to exact indentures
for their scholars, relying upon the
moral effect which such instru-
ments may exert upon the parents
who make them, and not expecting
to enforce them legally. If so I
shall offer no objection at present,
nor will my opinion as to their
legality be made known to the
Chinese Government unless
complaint is made or a case

comes

comes here on appeal, which
would compel an authoritative
declaration to be made.

As yet nothing has come to me
from the Tsung li Yamên about
your case.

I am, Sir,
Your obedient Servant
(Sgd) Frederick F. Low

P. S. You are at liberty to read this
to Mr. Corbett, with a distinct
understanding that neither the
substance of it nor a copy shall
be communicated to the press.
This condition is made as a
measure of precaution, for if it
be published, it would soon find
its way to the authorities, provin-
cial and imperial.

F. F. L.

Sub N Ack- Appun
Com
Ack'd -

Mr Platt

Ack'd Jany 4 1873 & Nº 119.

No 166 Three Enclosures

Legation of the United States
Peking June 24. 1872

Frederick F. Low
to
Department of State

Subject

Coolie Trade.

Encloses copy of a despatch which he has addressed to Prince Kung, upon the subject, and a notification of the Russian Minister.

No 166 Three Enclosures

Legation of the United States
Peking June 24 1872

Sir:-

I have the honor to enclose copy of a despatch which I have addressed to Prince Kung concerning Coolie emigration and its abuses.

The objects I had in view in sending this communication were:-

1st To stimulate the Government to greater vigilance in looking after

Hon Hamilton Fish
Secretary of State

after its own officials at the ports;

2° — To cause an effort to be made to check, if not stop entirely, the supplying of coolies to slave dealers at Macao;

3° To relieve, so far as it is possible, our people from the stigma which justly attaches to those nationalities engaged in or who promote the nefarious traffic.

With this end in view I have, as you are aware, on behalf of the Government of the United States, renounced and repudiated

at all

desire for
all participation in, or sympathy with, coolie operations in any form. In making this declaration I have, it may be presumed, only given expression to the settled conviction of our people, that slavery in any form cannot receive their support or countenance.

The coolie traffic is one of China's great griefs. Both Government and people feel that it is a great wrong and injustice, forced upon them against their will by foreign nations. This feeling is, so far as I can learn, not confined to any section or class,

but

but is universal. To this settled conviction of grievous wrong from which they suffer may be traced much of the ill will and resentments towards foreigners.

In view of this, considerations affecting our material interests alone would suggest that no reasonable efforts should be omitted to impress upon the Government, and through it upon the people, that neither the Government nor the people of the United States are responsible for the continuance of the Coolie trade.

The Russian Minister

has

has recently expressed to the Yamen views similar to those contained in my note; he has also issued a notification to his nationals upon the same subject, copy of which I beg to enclose.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

P.S.

Copies of my note to the Prince have been sent to the Consuls at Foochow and Canton, to be communicated to the Viceroys of Fokien and Kwangtung provinces.

F. F. L.

Enclosures

No 1 Mr Low to Prince Kung
June 14. 1872

No 3 Notification of the Russian
Minister in regard to the
Coolie Traffic

No 2 Gen'l Le Gendre to Tsotai of Amoy
Janry 26/72

Enclosure No 1
Dispatch No 166

Legation of the United States
Peking June 14th 1872.

Sir:-

In the year 1866 this Legation received from Your Imperial Highness a note enclosing the draft of certain rules for the regulation and control of the emigration of Chinese subjects who might wish to go abroad as hired laborers, in accordance with the 5th Article of the British, and 9th Article of the French treaties of 1860.

These rules it was stated, had been approved of by the representatives of England and France, and the United States Chargé d'Affaires was requested to see that his nationals respected and obeyed them.

A copy of Your Imperial Highness note, and the rules, were, without delay, communicated to the Government of the United States; and the President not only gave them to His Imperial Highness Prince Kung.

His sanction but caused orders to be sent to all the Diplomatic and Consular officers in China to enforce a strict compliance with the letter and spirit of them by citizens of the United States. The enlightened action of the Government of His Imperial Majesty in framing the rules and the sanction given to them by the representatives of two of the great European powers, were regarded with much satisfaction by my Government. and it was hoped and confidently expected that the new regulations would, if properly administered and obeyed, materially lessen the evils incident to the Coolie traffic and secure to the helpless people most directly concerned a larger measure of justice than had been the case hitherto. You were informed at that time that so far as the Government and people of the United States were concerned restrictive rules were not required, for Congress had enacted

a

a law four years previously
forbidding the transportation of
persons bound to service by contract
from China to any foreign country,
and imposing severe pains and
penalties for its violation. That law
is still in force.

The experience of the last five
years has, I regret to say, not justified
the reasonable hopes indulged in
when the rules were first made known;
on the contrary the evils have not
diminished but rather increased.
It is believed that this unhappy
result is not due to any defect in the
rules, but only to their maladminis-
tration. If my information
be correct, your own officials are
responsible for much of the
disgrace which seems to be inseps-
arably connected with the Coolie
trade. To be sure, unscrupulous
foreigners are in a large measure
chargeable with promoting the traffic,
but their efforts would be unavailing,
were they not aided by dishonest

local

local officials, and unprincipled natives. The port of Macao has been and is the place from whence most of these unhappy emigrants have been shipped chiefly to Cuba, and other Spanish Colonies and Peru.

Painful reports have on more than one occasion reached you through this Legation, from those in Peru, and if I am not misinformed, the condition of those in Cuba is if possible worse.

Most of the emigrants shipped from Macao are brought there by their own countrymen by means of false promises or by force and yet I am unable to learn that any honest or effective steps have been taken by the native officials to check or prevent such operations. On the contrary the fact is too well authenticated to be doubted that the local officials have not only done nothing to prevent the traffic at Macao, but they have by indirect and unlawful means promoted it at the other ports in Kwangtung and Fokien.

To accomplish this some of the most

most wholesome of the rules framed by Your Imperial Highness have been set aside and local rules enacted in their stead, by means of which laborers have been kidnapped and sent on board ships without any guarantee being given that they shall be kindly treated and rewarded for their labor, and without any provision being made for their return after the expiration of their contracts.

Not long since the American Consul at Amoy learned from sources which he deemed reliable that the local officials at that port, in conjunction with the Spanish Consul, were arranging a plan for setting aside the regulations of the Imperial Government and instituting instead less stringent local ones the tendency of which would be to facilitate the occupation of kidnappers. The Consul believing such action on the part of the local officials to be in violation of treaty, in contravention of the

laws

laws of the Empire, and an outrage upon justice and humanity, addressed a despatch to the Taotai protesting against the proposed action. A copy of this despatch I have the honor to send herewith for the information of Your Imperial Highness.

Recent information leads me to believe that the scheme at Amoy has been temporarily abandoned but that a similar attempt will be made at Swatow. In view of these considerations, I have most respectfully to request that Your Imperial Highness will cause stringent and positive orders to be sent to Kwangtung and Fokien forbidding the abrogation of any of the rules of 1866, or the enacting of new ones by the local officers.

Rules and regulations agreed upon and promulgated by the Imperial Government and the foreign Legations for the purpose of giving proper effect to the treaties between China and Western nations, should

be

be respected and obeyed, until altered or rescinded by the authority by whom they were made, and I improve this occasion to enter my earnest and solemn protest against the assumption by Taotais and other local officers, of authority to either make, alter, or abrogate rules and regulations affecting treaty rights, whether they be for the regulation of emigration, the management of trade or for any other purpose. Such prerogatives are vested in the Imperial Government and the foreign Legations alone, and cannot be delegated to local officers of the Government or to Consuls.

The consistent course pursued by the Government of the United States since the treaties of 1858 and 1860 went into operation, leaves no room for doubt as to its sincere desire to see the abuses and hardships of the Coolie trade mitigated, and if possible, abated altogether. The baneful influence

of

of African slavery in the United States, the sacrifices that our people made to abolish it, and suppress a gigantic rebellion, inaugurated, and supported mainly by those who desired to extend and perpetuate the institution, have profoundly impressed the Government and people that enforced labor in any form, whether for a term of years, or for life, is an evil unmixed with good. But while my Government for the present voluntarily chooses to abstain from taking full advantage of the provisions of the treaties of 1860, as defined and regulated by the rules of 1866, this action cannot be construed as a renunciation of any right or privilege granted by treaty, nor do I wish to be understood as objecting to the course of other nations in availing themselves of all their treaty rights.

But when it becomes apparent that the wholesome and humane regulations proposed by Your Imperial

Imperial Highness and agreed to by my Government, are evaded or set aside entirely through illegal conspiracies between your own officials and unprincipled foreigners engaged in the traffic, the effect of which is to subject the inoffensive and ignorant emigrants to hardships and cruelties of which history furnishes few parallels. I conceive it to be my duty as the representative of an enlightened and Christian nation, to protest in the name of justice and humanity against such proceedings. To bring the whole subject to the attention of Your Imperial Highness and the high Ministers of the Yamên with a view of requesting You to seek out and apply a remedy, and also to relieve, so far as it may be possible, my Government from the suspicion of complicity in or sympathy with the Coolie traffic is the chief purpose of this despatch.

The

The latter is, I regret to say, not possible to accomplish fully, for the masses of the people are unable to distinguish clearly between different nationalities, hence the good name of the innocent suffer equally with the guilty in popular esteem.

I cannot doubt that the Government of the Emperor is anxious to so regulate and manage emigration as to protect the inoffending subjects of His Majesty from fraud and violence. It is I think, susceptible of being done, if the Government will resolutely address itself to the task. If the rules of 1866 be honestly administered and observed the emigration from the ports open to trade will not be large, and those who do go will be reasonably protected, and if Kidnapping and other kindred practices be broken up, the traffic at Macao will be materially lessened, if not stopped altogether. If however the trade at the latter port should continue

in

in spite of all your efforts, it might be well to consider the propriety of endeavoring to come to an understanding with the Government of Portugal which would put an end to a traffic, the disgrace of which is inseparably connected with the name of Macao.

An earnest effort directed to that end, would, I ful sure, receive the sympathy and moral support of most of the Treaty Powers and would be approved of by the whole civilized world.

With renewed assurances of my high consideration, I have the honor to be

Your Imperial Highness'
Obedient Servant
(Signed) Frederick F. Low

Enclosure No 2
Dispatch # 166

General Legendre U. S. Consul for Amoy and the dependencies thereof, herewith makes a communication.

I learn from an American citizen till lately connected with the Spanish Consulate at Amoy, that an Agency for the exportation of coolies to Havana, under a strict consular supervision is soon to be established at this port.

Havana is the capital of Cuba an island that almost touches the territory of the United States, a circumstance that sufficiently explains the great interest we take in the question of coolie emigration thereto.

While the United States have prohibited the traffic in coolies for the South American market, our statutes expressly except from their inhibition and penalties the free and voluntary emigration of Chinese subjects to any country.

In

In 1866, the Prince of Kung, prepared a set of rules for the protection of Chinese emigrating as hired laborers, in accordance with the Articles referring to this subject, in convention with various Treaty Powers.

On the 5th year of Ting Chih, 1st moon, 19th day these rules were made known to the representatives of England and France, and on the 15th of March of the same year, His Imperial Highness requested the United States Minister at Peking to make these rules known to American merchants, and to especially point out that they were neither to engage laborers at any Treaty Port nor permit their ships to take them on board unless the rules had been complied with.

On the 21st of August of the same year, the United States Secretary of State approved these regulations, and now any American guilty of violating the same, upon information furnished by officers of the Chinese Government, is liable to be held for trial

trial before a Consular court, under Section 14 and 23 of an act to carry into effect provisions of our Treaty with China, approved June 22. 1860.

Wherever the rules of Prince Kung have been applied honestly under the joint supervision of the Consuls and the native local Authorities, the evils connected with the Coolie trade have been greatly diminished. In the year 1869 I strongly recommended Tseng Taotai, to conform to these rules: but he neglected to do so; and he drafted special regulations with the Spanish Consul Mr. Faraldo, which more especially applied to those engaged in buying men for the Havana market. As I had foreseen the result was soon attended with many evils, and the Spanish traffic in men to be shipped to Southern America from this port became so revolting that the foreign merchants of Amoy addressed a petition to the various

Consuls

Consuls that it might be put a stop to. I sent a copy of the said petition to the Minister of the United States at Peking for the information of the high Chinese authorities, and, as it was proper, on the 3rd of June 1869 I also sent for the Taotai's perusal a copy of said petition, hoping that he would carefully consider the subject whether there was any good plan, by which the traffic might be conducted in conformity with both, the treaties between China and Spain, and the aforesaid Rules.

My action in this matter was fully approved by my Government and my views were indorsed by the Tsung li Yamên, as it appears by a decision rendered by this high body and which was communicated by Mr. Acting Com. of Customs. Jones.

In compliance with this decision, the Commissioner of Customs is to cooperate with the Superintendent of Trade in seeing that the regulations of each agency opened by the local

or

& Provincial officials are in
accordance with the Rules drawn
up by Prince Kung. He is also
to act with the person deputed by the
local authorities in ascertaining that
each emigrant fully understands the
contract under which he proceeds to
western countries, and he is to sign and
seal each contract in proof that the
native emigrant understands its
meaning and accepts its terms.
Any clause in contracts thus made
which should purport to render
invalid any of the provisions of the
Rules, is null and void.
The most important of these Rules,
are rules second, eight and nine,
which taken together make it
obligatory upon the Consuls and
Chinese authorities to see that, at
the expiration of the emigrants
contract, means shall be afforded
to both the emigrant and his
family should they accompany
him to cover the expenses of his
or their return to China.

How

How this can be carried into effect is more than I could say; but + certainly there is no power vested by the rules or any treaties between China and foreign Countries, in either the Consuls the local or Provincial authorities to evade the obligation.

I understand that it is proposed by the Spanish Coolie operators, that in imitation of Tséng Taotai, you should again overcome the difficulty by making special rules for Spanish merchants, whereby all the points of the Rules of Prince Kung which interfere with them should be removed, Or in other words, you are asked to create a monopoly in favor of Spain, in violation of the laws of the + Empire.

Against this I should feel bound to protest. For if the Tsung li Yamen were justified in enacting those rules, you are bound to see them complied with, and further than this, by the

the favored nation clause, you have no right to afford facilities to Spanish merchants which our own countrymen are forbidden to share by your own laws, and the monopoly you would create would be in violation of the 5th Article of the treaty of Nanking between Great Britain and China signed 29th August 1842 and whereby all monopolies of trade are abolished.

The treaty between Spain and China was signed in 1867, surely there is nothing in said treaty which can be construed as justifying Spain's claim to the establishment of a monopoly in favor of the merchants.

I concede that Article 10th of the said treaty confers upon both the provincial and local authorities the right to make local regulations, so do the rules of Prince Kung as regards the British and the French, but then only, we must add, in what concerns matters

of

of detail, in the settlement of which the local and the Provincial authorities and the Consuls must still be guided by those Rules.

All Western powers will unite with Spain in complaining that those Rules greatly stand in the way of the free and lawful emigration of Chinese to foreign countries. But the fact that all Western powers are waiting the pleasure of the Emperor of China to modify these Rules, sufficiently shows that they acknowledge that he had an indisputable right to make the same and I believe that Spain, or ourselves, or any other power, under the laws of nations, and the native officers under the laws of the Empire are bound to see emigration to Havana conducted in conformity with the Rules prepared by Prince Kung.

Lo Kwan Taotai in charge at Amoy

(Signed) Chas. W. Le Gendre

January 26th 1872.

Enclosure No 3
Despatch No 166

Notification.

It has come to the knowledge of His Imperial Russian Majesty's Government that certain ships bearing the Russian flag have transported Chinese Coolies to countries beyond the seas.

This trade being forbidden by the Government, His Imperial Majesty's Legation has therefore the honor to remind all Russian subjects in China of this prohibition and to beg the Consulates that they should request all Russian subjects wishing to purchase ships to sign a formal declaration that they will not join in any such operations, which are considered illicit by our Government.

By order:
(Signed) A. Koyander.
Secretary of Legation.

April 27th
May 9th 1872.

Sept 2

Adv - Mr Low's letter to Prince King is probably the most effective mode we might at present adopt the opposition of the Brit. to the coolie trade can be employed to advantage

Confidential

Dec 23 Oct

Mr Platt

Not to be copied for publication

No 167

DEPARTMENT OF STATE
RECEIVED
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1872

Legation of the United States
Peking June 26. 1872

Frederick F. Low
to
Department of State

Subject.

Coolie Trade.

Gives additional reasons for addressing Prince King on the Subject, and makes suggestions as to the policy of Foreign Governments with reference to the Port of Macao.

appears to require some notice. Cobden

Confidential

No 167

Legation of the United States
Peking June 26. 1872

Sir:-

In addition to the reasons given in my No 166, for addressing Prince Kung upon the subject of Coolie emigration, there are others which it would not be convenient to have made public at the present time;- therefore I beg to state them confidentially, in a separate despatch.

How Hamilton Fish The
Secretary of State

The Coolie Convention of 1866 between China, and England and France, and which was officially notified to this Legation by the Imperial Government. (See diplomatic Correspondence 1866 part 1 pp 497, 498) was never ratified by either England or France. But while I have been made aware of this by common report, the records of the Legation contain no information of an official character which modifies in any particular the declarations of Prince Kung in the note before referred to. Nor is it indeed

understood that England & France have, since that date, exercised the right to engage Coolies at the ports in any other manner that that provided for in the Convention.

In view of these facts I felt justified in treating them as valid and of binding force when alluding to the Regulations in my communication to Prince Kung.

I am informed by the British Minister that he has recently received instructions to open negotiations with a view of concluding a new Coolie Convention; and it is understood

that

that the new French Minister is bringing similar instructions from his Government.

It appears that the objections to the Convention of 1866 which led to its rejection were, the limited term for which laborers could be engaged and the provision for their return at the expiration of their contracts. It is now proposed to make the term ten years instead of five, and omit the stipulation in the old convention for their return. The substance of his instructions has been made known by the British Minister

Minister to the Chinese Ministers; formal negotiations will, however, not be inaugurated until the arrival of his French colleague.

I am privately informed that the intimations from the English Government were not received with favour by the Yamen; and it is not probable that the Imperial Government will give its assent to any new treaty or Convention, the effect of which will be to increase the Coolie traffic, unless forced to do so by a fear of consequences in case they refuse. Nor

is it likely that all the powers which England and France can bring to bear, short of actual war, will cause this Government to recede from its present position of hostility to the granting of ~~any~~ such concessions, provided it can have reasonable assurance that such demands will not have the sympathy and support of the other Treaty Powers.

Under these circumstances it seemed proper that the attitude of the Government of the United States touching this question should be made known. In my note to the Prince

Prince I have endeavored to make known our position clearly and distinctly, and at the same time to avoid giving offence or wounding the sensibilities of the nations whose policy differs from that of the United States. Similar assurances have been given by the Russian minister; and the representative of Germany will make known the views of his Government, which are understood to be in accord with those of Russia, when he returns two months hence.

Reducing this whole question

question to the low standard
of policy and expediency,
leaving Christian civilization
and humanity, quite out of
view, it is not easy to per-
ceive how there can be a
diversity of opinion as to the
position of foreign Governments
in regard to the Coolie question,
provided they desire to cultivate
peaceful and friendly relations
and promote commercial
intercourse with this Empire.

The removal of
restrictions will increase the
trade in men, and the effect
of an enlargement of the traffic
will be to increase and intensify

the

the hatred and resentment of the people.

It may be said by those who seek to justify the removal of restrictions at the ports that, so long as Macao continues to be the place mark that it is at present, restrictions at the ports serve no useful purpose in checking the abuses of the traffic. To this suggestion I would reply that "two wrongs do not make a right". Instead of placing the ports in a position to compete with Macao, means should be sought for putting

a

a stop to it at the latter place.

The <u>Right of self preservation</u> is one of the great fundamental Principles of International Law; and it may become necessary for foreign Nations, whose interests are imperilled by the action of the Macao officials, to take into consideration whether they would not be justified in resorting to extreme measures to break up a traffic which is condemned by the moral sense of the civilized world. If the African slave trade is piracy, it is difficult to find any valid reason for

upholding

upholding the Coolie Trade,
unless it be that its base of
of operations is at a port
which is under the nominal
jurisdiction of a Nation
making pretensions to modern
civilization and christianity,

The jurisdiction of
the Portugese Government over
the port of Macao is an
assumption founded entirely
on the right of prescription.
No concession, by treaty or
otherwise, has ever been made,
so far as I can learn, by
the Chinese Government; On
the contrary the claims of
Portugal is stoutly denied.

The

Government feels keenly the wrong and injustice of having a portion of its own territory taken possession of by a foreign Government and made a depot for smuggling operations and a place mark for the forcible and fraudulent sale of its own subjects. I have little doubt that, if the Chinese could be assured of the non-interference of other nations, the present government of Macao would be forcibly ejected. Of their ability to do this there can be no question. I should, however, regret to see such a step taken because

of

of the possible ill effects it might have upon foreign interests generally.

But, unless something is done before long to abate the scandal serious troubles will grow out of it.

The Chinese Government would willingly pay a money indemnity to Portugal equal to all her real interests in the place, and would open the port to foreign trade the same as Canton. Indeed such a proposition has, I understand, been made. It was peremptorily and offensively rejected.

I am profoundly

mistaken

impressed with the conviction that it is the duty of the Treaty Powers to bring about an arrangement by which the title of Portugal in Macao (can be extinguished). This is the best and only effectual plan for putting a stop to the Coolie trade. That this will be done sooner or later I have no doubt. The only question about the matter is, will the effort be made now or will it be delayed until the resentment and anger of the people shall have retaliated upon the lives and property of the innocents

for

for the wrongs and hardships to which they feel they are subjected by the Portuguese.

I may add that I am not unmindful of the fact that interference in such matters is contrary to the settled policy of the United States; but whether the conservation and protection of our already large and rapidly increasing trade with this Empire will not afford sufficient justification for a departure from it, is a question worthy of the serious consideration of the Government.

A combined moral pressure from the principal Treaty Powers would

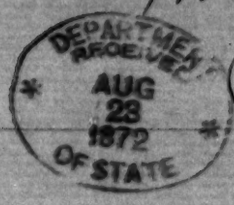
would undoubtedly accomplish the object.

The suggestion is made for the consideration of the President and the Department.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

ask

dispatch



No 168.

Legation of the United States
Peking June 28. 1872
Frederick F Low
to
Department of State

Subject

Reception of
Department despatch No 78
with its enclosures.

No 168

Legation of the United States
Peking June 28. 1872

Sir:-

I have the honor to acknowledge the receipt of your N° 78 of 25th April enclosing copy of a note from the German Government to its representative in Peking and one from the latter to Prince Kung, concerning the Missionary question.

I am, Sir
Your obedient servant
Frederick F. Low

Hon Hamilton Fish
Secretary of State

dl Dimon

Legation of the U States

Peking June 30. 1872

Hon Hamilton Fish

Secy of State

Dear Sir,

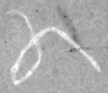
I beg to advise having drawn on you under this date my draft at 15 days sight in favor of Messrs Russell & Co for One thousand dollars, gold.

This draft is drawn to cover, in part, the loss by exchange on my Salary drafts on London. It will be included in my next account to the 5th Auditor of the Treasury

Very respectfully

Your obedient Servant

Frederick F. Low



Sub Adv acks

Mr Pratt

No 169 One Enclosure

Legation of the United States
Peking July 5 1872
Frederick F Low
to
Department of State

Subject

American representation in Japan.

Encloses an editorial from the Shanghai Courier upon that subject, and also upon American representation in the Far East generally.

No. 169 One Enclosure

Legation of the United States
Peking July 3. 1877

Sir:-

I beg to inclose an editorial, entitled "American Representation in Japan", which appeared in a recent number of the "Shanghai Daily Evening Courier".

Besides approving and commending an article in the "Japan Mail" in which Minister De Long is severely criticised

Hon Hamilton Fish
Secretary of State

criticised), the editor of the Courier indulges in reflections upon American representation generally in the East which, to say the least, are not specially complimentary to us.

It does not come within the scope of my duties to express opinions or offer suggestions concerning Japanese questions. The Department is in a position to judge of such matters, and also of the propriety of the Minister's action, better than any one else. I may, however, without

without impropriety, be permitted to observe that, during a brief visit to Japan last year, I heard from our own countrymen and others residents there nothing but warm commendations of Mr De Long's course; and there appeared to be every indication that the Ministers position and influence with the Japanese Government was second to none of the foreign representatives.

With reference to the Courier's remarks upon American representations generally in the East, candor compels

compels me to say that they
are not entirely destitute of
foundation in truth. But
while it is true that our
service is not what it
should be, I am not prepared
to admit the justice or
propriety of such sweeping
denunciations. If the
truth could be ascertained
it would be found, I suspect,
that the authors of both of
the articles referred to were
inspired more by national
jealousy than an honest
desire to see an improvement
in our diplomatic service,
or an anxiety to protect the

orientals

orientals from "foreign assistance" or "vulgar rapacity".

In cosmopolitan communities like those in China and Japan it is perhaps but natural that there should be found national jealousies. Whether reasonable or unreasonable such is the fact; and with no nationality is this trait so conspicuous as the English. British merchants appear to regard China as a dependency of Great Britain, and look upon the people of other countries resident here, in whatever capacity, as little

better

be ttho than unwelcome intruders.
These extreme opinions of the British
mercantile interest find expression
through the Newspapers at the
ports. I should say in this
connection that, with the exception
of one or two unimportant sheets,
the entire Press in China and
Japan is under the control
of Englishmen. Even our
so called American paper, the
"News Letter," is owned and edited
by the proprietor of the Courier,
an Englishman.

I am sir
Your obedient Servant
Frederick F. Low

Enclosure

No 1 Editorial from Shanghai Courier

Enclosure No 1
Despatch No 169

"Shanghai Courier" June 21. 1872

AMERICAN REPRESENTATION IN JAPAN.

NEWSPAPERS do not often trouble themselves to publish bald truths about the representatives of the United States, partly perhaps, because in the American official character, there is something at once so self-asserting, and yet so "touchy," that it is pleasanter on the whole to flatter than to deal plainly by them. Our ably-conducted contemporary the *Japan Mail*, however, has, much to its credit, as we think, on a recent occasion broken through the customary reserve, and has exposed, in a moderate, but telling article, some of the foibles of American diplomacy in the Far East. We have ourselves more than once drawn attention to the inappropriateness of the selections sometimes made by the United States for service in this distant field. Military heroes, "politicians," stump-orators, ex-Missionaries, ardent reformers,—all most estimable in their own sphere, but with no pretence to any special qualification for the work they are sent to do—are thought good enough to cope with the simple-minded heathen at Pekin, and to assist in the reconstruction of society in Japan. Sometimes, indeed oftener than might be expected, you light upon a polished and cultivated gentleman; but then again you may find a half-educated, robust-mannered personage clothed with the highest dignities which the State can bestow. It is a mere chance, since the principle of selection is neither fitness for the post nor merit of any but the most sordid kind. The present Minister to Japan, it appears, is unversed in the common mysteries of grammar, and the composition of his despatches is such as, according to our Japan contemporary, would discredit a fourth form boy at any decent school. He says, "freighted," when he means "fraught," and speaks of the "American Government, its institutions and policy," when he means the "Government, institutions, and policy of America." These are but peculiarities of form, however, with which, *per se*, no sensible person would quarrel. But it appears that the matter of Mr. De Long's despatches is even more objectionable than the manner. A crude and almost childish scheme of his has just been "blown upon," whereby this untutored, but most aspiring diplomat aimed at no less than getting the whole government of Japan into his own hands. Having induced the Mikado to order through him a white elephant in the shape of a "legal adviser," Mr. De Long commends the matter to Mr. Secretary Fish, as a potent means of advancing American interests in Japan, since it would prevent the selection of a representative of some other nationality, "who, being partial to another nation's interest, might thereby become inimical to our own." But surely the malignant influence of an alien lawyer need not appall the Minister who has for two years set at nought the sovereign rights of the Japanese Government by permitting his nationals to resist the regulations of the Yokohama Harbour-Master, whose misfortune it is not to be a citizen of the Great Republic. And since the defects of Wheaton's International Law may thus be so easily made good by the spontaneous efforts of a local diplomatist, what need of a legal adviser specially to protect the interest of a nation so ably represented? The Minister adds that the appointment would be "freighted" with important consequences, such, for example, as this:—"It is not impossible that the person you may select for this place may have almost the whole foreign policy of this government entrusted to him, for management, in time."

"Naked,—but not ashamed," is the best epithet we can borrow to describe this diplomatic plot. No harm, of course, is meant, and Mr. De Long is probably as unconscious of impropriety in his astounding proposition as the Japanese are said to be in the promiscuous ablutions in which they so innocently indulge. Still the mischief a recklessly innocent person in the position of Mr. De Long may do is something considerable.

The leading idea of American diplomacy in Japan as illustrated by Mr. De Long seems to be little better than a comprehensive job. American citizens are, on one pretext or another, to be planted everywhere, at preposterous salaries: Ministers of Agriculture, Legal Advisers, Professors, Engineers and Surveyors—parasites of every kind are to be fastened on the unfortunate Japanese, either to gratify a very low personal ambition or to reflect meretricious glory on the American nation. It really seems impossible for the average American representative in the East to take a broad and unselfish view either of the interest of his own country or that to which he is accredited. Early associations have narrowed him down to an international pettifogger. From the modes of thought and motives of action of his younger days he is never able entirely to emancipate himself; and the true dignity of his new position seems to the last to be above his comprehension.

If there is one country on the face of the earth to which foreign prestige is of little consequence, surely, it is the United States of America; and when the prestige sought for is of the paltry jobbing kind we have indicated, it is worse than unworthy of a great people. Are the United States so much over-populated that the loftiest ambition of their Ministers abroad is to encourage the emigration of their citizens?

The fault is clearly in the early training of the persons chosen to fill diplomatic offices. "It would be unjust says the *Japan Mail*," to blame Mr. De Long for the intrigue which sent him to Japan as the representative of the United States." We know nothing of the intrigue alluded to, but it is most unfortunate that such high and honourable posts should be at the mercy of any intrigue, and that the representative of a great country should be chosen for his supposed successes in the somewhat debasing struggles of political coteries.

The mania for providing for poor relations at other people's expense, has its ludicrous aspect when transferred to so large an arena as that of international affairs; and it is only the force of a habit of mind which has become a second nature that can prevent the individuals themselves from perceiving how they bring contempt on their own heads, by subordinating the noble functions of a diplomatist to the pitiful tactics of a place-hunter. Mr. Burlingame's famous Treaty, with its wind-bag of empty phrases, and its one significant clause providing for the employment of American citizens by the Chinese, never impressed us with a high idea of the dignity of the statesmen concerned.

With regard to Japan, it is but too evident that officious, ignorant and, in some instances, perhaps, unscrupulous people are doing incalculable injury to the country; and it is much to be regretted that they should received any countenance from the ill considered efforts of Foreign representatives. "The pernicious folly," as our Yokohama contemporary well puts it, "of sending young men abroad before their minds have been properly prepared to turn the advantages of foreign travel to good account, requires to be checked in every direction." But Mr. De Long boasts of having joined in the rage for sending Japanese youths on their travels for the pretended purpose of being educated. The Japanese are disposed of themselves to "progress" as it is called, quite fast enough, without the aid of foreign stimuli. And foreign assistance is still more to be deprecated when it takes the form of vulgar rapacity. As the *Japan Mail* tersely puts it,—to "drag out the financial bowels of a poor nation under cover of an iniquitous contract for iron-clads," is not a civilizing method which calls for unqualified commendation.

Copy in the memorandum to Legation Peking

Divided 17 Oct

DEPARTMENT RECEIVED SEP 9 1872 OF STATE

No 170 One Enclosure

Legation of the United States
Peking July 6. 1872

Frederick F. Low
to
Department of State

Subject

Trade in Hainan, and the opening of a port on that island.

Encloses a memo of Mr Robert Hart upon the subject.

No 170 One Enclosure

Legation of the United States
Peking July 6. 1872

Sir:-

Some months since the Foreign Office ordered the Inspector General of Customs to proceed to the island of Hainan and arrange for establishing a branch of the foreign Customs at Kiungchow, preparatory to the opening of that port to foreign residence and trade, in accordance

Hon Hamilton Fish
Secretary of State

accordance with the request made by myself and the other foreign Ministers last Winter.

Upon his return to Canton after having visited Hainan, Mr Hart sent me a memorandum, in which are embodied his observations, a copy of which I have the honor to send herewith.

The paper is worthy of a careful examination.

The suggestion with reference to making an experimental trial of one year before deciding definitely upon where the ports shall be, during which

time

time travel is to be restricted and no Passports issued, is worthy of consideration. The advantages likely to accrue from such an arrangement are obvious. Experience may demonstrate that some point other than the one mentioned in the treaty will be more eligible for the ports, as was the case with Newchwang and Chefoo.

I am inclined to look with favor upon the sug-
-gestion, and if the Chinese Government proposes such an arrangement and the

others

other foreign Ministers do not seriously object, I shall have no hesitation in recommending the President to give it his sanction.

I may add that Mr Harts report upon the present condition and future prospects of Hainan as a point for foreign trade is, on the whole, more favorable than I had anticipated.

I would suggest that the Treasury Department be furnished with a copy of the memorandum,

I

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Enclosure

No 1. Memo by Robt Hart
of his observations during
a recent visit to Hainan

Enclosure No 1
Despatch No 170

Mem[d] of a visit to Hainan, to make arrangements for opening of Kiungchow to foreign trade.

1 The prefectural city of Kiungchow is some two miles from the sea shore, and is connected by a good road with the walled town of Hoihow, built on the left bank of the shallow tidal stream in which the bay ends. Kiungchow is a city of considerable extent, and contains the official residences of Tautai, Prefect, District Magistrate and Chentai (General); its bazaar is well [illegible] supplied with Fish. Fowl and Vegetables, but there do not appear to be many wealthy people among its inhabitants, and the shops seem to do but a petty retail business.

2 Hoihow is the real trading place of the neighborhood, and its main street, running north and south, contains some very respectable stores

stores; in the bay into which the Hoihow creek runs, there were over a hundred junks at anchor, several of them being of the largest sizes, and in an adjacent bay lay some two or three dozen others.

3 Kiungchow does not appear to be either as large or as wealthy as Taiwanfoo, but Hoihow is a very much more promising place in appearance than either Takow or Tamsuy.

4 After a careful examination of the neighborhood, ashore and afloat, and after hearing what the local officials had to say concerning the opening of the port, it appeared to be best to go as little as possible into detail at the start, and to make the preliminary arrangements of an experimental kind, leaving it to experience to determine the rules to be eventually adopted.

5 The first point that came up had reference to foreigners houses In this connection it is proposed that

that foreigners shall, at first, merely rents houses and godowns at Hoihow; and that one year be allowed to pass before land be purchased or set apart for the construction of foreign houses.
In favor of this proposal there are several reasons:
1st The peculiarity of the bay makes it uncertain which will eventually be the most convenient location for foreign godowns;
2e The Newcomer cannot in a moment determine where it will be most convenient or healthiest to have his dwelling house;
3e It will be well to have experience of the four seasons there in order to know what style of a house will be safest and most suitable; and,
4th By waiting a year merchants will acquire that knowledge of the locality and its resources which will most assist them in their plans for the future.

After residence, the next point that came up was <u>travelling in the interior</u>, and in this connection it is proposed that for a year from the opening of the ports, foreigners shall be limited to the space enclosed between two points in the coast each 100 li from Hoihow, and a line in the interior distant 50 li from the coast. Within these limits foreigners may circulate freely; at the same time it is advisable that, at first, they take with them runners or police, when visiting new localities.

In support of this proposal it is said:

<u>1st</u> That it will be well to ~~abstain~~ accustom the people in the interior to the presence of foreigners gradually; and,

<u>2d</u> That the <u>Li</u> tribes or aborigines are, in several directions, to be encountered within a hundred li of Hoihow.

After the lapse of a year the limits

limits now proposed will be done away with, and a special rule regarding travelling in the interior substituted.)

7 Travelling suggests Transit Dues, and in that connection it was proposed that, for a year to come, Transit Dues should not be collected, and that their collection should be arranged for when the restriction on trade is removed. The Prefect is anxious about his Lo-ti-Shui, but if travelling is to be for a time subjected to special restrictions, it will be well to defer the collection of Transit Dues.

8 The anchorage for ships was next talked about, and in this connection it was proposed to name the part of the Bay known as Hsia-men as the anchorage for a year, and to defer the fixing of boundaries and the definition of port limits until a twelve months' experience of the place shall have shown what its requirements really are.

Lin

In view of its other peculiarities and the unsheltered position of the Bay when certain winds blow, it will be well to begin there.

9 The only remaining point referred to Customs' Regulations, regarding shipments and discharge of cargo, and payment of dues and duties, and in this connection, it is proposed to adopt the Swatow Regulations and procedure for the first year, and there to make such modifications as local peculiarities may call for. The Swatow Regulations have been in operation a dozen years, and there will be no objection to their introduction at Kiungchow; they contain nothing peculiar, and the main reason for adopting them is that they are the Rules of the only other Port under the joint direction of the Gov Genl and Hoppo.

10 These five proposals, affecting residence, trade, Transit dues, anchorage, and Customs and Port regulations, appear to cover all

the

the ground requiring to be touched on before declaring this port open; on the one hand the novelty of the foreigners appearance in Hakodate, and on the other the utility of experience before proceeding to place intercourse on a more strictly defined footing, are in favor of the tentative and experimental nature of the proposals, and, if now accepted, in a year time every one will have a much better idea of what is most needed and calculated to be most useful.

During our stay the Bay was surveyed and a plan of it prepared; a half hourly tide table was kept and the readings of the thermometer were noted. The mornings were calm and pleasant; with the early afternoon, a rushing wind from the west swept over the Bay, followed by heavy rains, with lightning and thunder; these storms lasted a couple of hours, and deliciously fresh evenings and cool nights followed.

During

During the summer and autumn, such storms occur two or three times every week, say the people of the place; for residents they will be very agreeable, but their violence will stop the working of ships. The North Eastern shore of the island is not well surveyed, and shifting sand-banks on which the sea breaks are known to be numerous; vessels under steam will probably therefore go direct from Hong Kong to Saouchow, where pilots should be employed for the trip to Hoihow, distant some fifty or sixty miles. Pilotage matters will be attended to after the opening of the port. Sailing vessels will probably find it safest to go round by the south of the island and enter Hoihow from the west. The plan of the place, the tide tables and the sailing directions appended will serve to explain the proposals made, and complement what has

has been already adverted to in this memo.

12 The people appeared friendly and the authorities well disposed; they all hope that foreign trade will bring wealth and life to the Port. Hoihow will certainly form a new centre; Steamers will bring to it from Hongkong, Macao and Saigon, many things that junks from the west coast now visit those places to procure, and will carry from it to those places what junks have hitherto carried on considerable risk. As a new centre it will take junk trade from Hongkong, Macao and Saigon, substituting foreign bottoms; it will enrich the northern part of the island of Hainan, and will make it the centre, to and from which will converge and radiate the junk trade of the west coast. The opening of the Port will suppress piracy in the neighborhood, and

will

will turn trade generally into safer and more convenient channels

13 As regards the house accommodation procurable at Hoihow, it is of course not of a very luxurious description. There will however be no great rush of people to the port, and the six or eight houses that may be wanted will be got without difficulty. A building was secured for the foreign Customs consisting of three ranges with the water frontage for $/400 per year, the first year according to local custom payable in advance. At a point half way between Hoihow and Kiungchow, on the high ground overlooking the Bay, will probably be the best place for foreign residences, or at another place on the west side of the Bay; but before incurring any outlay for erecting new houses, merchants will

will do well to wait and see more of the place and its resources. The probability is that Kiungchow will be found a cooler and healthier place of residence than either of the Formosan ports, and as regards trade, its position and near coast peculiarities seem to authorize the hope that it will in time become the center of recognized, if not considerable importance

14 When the port is declared open to trade, an office of the foreign Inspectorate will be opened, and a Bank named to receive duties: Mr H. O. Brown will take charge of the Customs as Acting Commissioner

(Sgd) Robert Hart

Canton 6th June 1872

DEPARTMENT OF STATE
RECEIVED
SEP 9 1872

W Pratt

Ack

No 171 One Enclosure

Legation of the United States
Peking July 10. 1872

Fredrick F. Low
to
Department of State

Subject

Transit Papers
and Drawback certificates.

Encloses a
Communication from the
Shanghai Chamber of Com-
-merce upon the subject.

No 171 One Enclosure

Legation of the United States
Peking July 10. 1872

Sir:-

With my No 149 of April 23d was sent the draft of a number of Rules submitted by the Chinese Government for regulating the issue of Transit Papers; a copy was also sent to the Consul-General with the request that he would furnish me with any

Hon Hamilton Fish
Secretary of State

any information in his possession which might be useful in the further discussion of the question. — Instead of giving me his own views, Mr Seward sent all the papers to the Chamber of Commerce and asked that body for an expression of its opinions upon the subject.

A response from the Chamber of Commerce has been received, copy of which I have the honor to enclose, 1/

The criticisms of the Chamber upon the proposed rules are, in the main, just, and

and the suggestions reasonable, and worthy of consideration.

I quite concur in the opinion that it will be the better plan and much safer to let the transit business alone and look to time and experience to work a cure of the evils, rather than accept a new code of Regulations, which can hardly fail, if duly enforced, to embarrass trade.

The Government having acknowledged that the nationality of the goods, and not that of the owner or carrier, is the only requisite necessary to entitle foreign merchandize to a

Transit

Transit Pass, all other question, may with propriety be left in abeyance and "allow the process "already existing to gain gradual recognition throughout "the Empire by force of its "inherent excellence".

The question will, I admit, not be placed on a proper footing until by a rearrangement of the tariff, the duties paid on importation shall free the goods from all inland charges to the point of consumption; and it is gratifying to note in the last paragraph of the communication referred to, that the mercantile

Community

community are beginning to realize this.

The British convention of 1869 contained a provision of this nature, which applied to the treaty-port provinces. It seemed to me an important modification of existing treaties, and hoped it would be accepted and sanctioned by the Treaty Powers. Nor have I seen anything since which leads me to believe that the rejection of that convention by Great Britain was not a serious error.

I have replied briefly to this Yamen note saying that many of the proposed

Rules

Rules are unacceptable, and promising to state my objections more in detail after the additional regulations intended to regulate Transit Passes outward shall have been formulated and submitted.

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Enclosures

No 1 Chamber of Commerce
Shanghai to Mr Low
June 18. 1872

Enclosure No 1
Despatch No 17

No. 355.

SHANGHAI GENERAL CHAMBER OF COMMERCE.

SHANGHAI, June 18th, 1872.

SIR,

I have the honour to acknowledge the receipt, through Mr. Consul-General SEWARD, of a copy of a Despatch from your Excellency, dated April 9th, accompanying the Draft of certain Rules proposed by the Chinese Government to govern and regulate the issue of Drawback Certificates and Transit Passes, and I am to convey to you the thanks of the Committee for the opportunity thus given to them of expressing the opinion of the Chamber upon this important document. The views of this Chamber with regard to the rules attaching to the issue of Drawbacks were expressed in my Despatch to the address of the Senior Consul under date 12th March, No. 348, and the Committee see no reason to change these. Practically, an extension to thirty months of the period during which foreign duty paid goods shall be entitled, on re-exportation to a foreign country, to a return of the Import duty, will satisfy the present requirements of trade, and therefore I have only to urge that as the Treaty prescribes no limitation by lapse of time of a right, which it acknowledges, and which is universally recognized by civilized countries, the proposed rule should be accepted by the foreign ministers only on the understanding that the regulation in question shall be subject to relaxation, whenever the general course of trade shall call for it.

It is satisfactory to know that the claims of re-exporters who have been hitherto surcharged with duty contrary to Treaty stipulations will be examined and adjusted, but it is incumbent upon me to point out that the return of duty cannot with fairness be confined to those cases alone in which it is ascertained that drawbacks have been applied for and refused. For, in consequence of the persistent determination of the Customs' Authorities not to grant the drawbacks in question during a period of nearly twelve years, it has latterly been considered useless to apply for them, and it will be obviously unjust if reparation be refused in any case in which it can be conclusively shown that the duty has been wrongfully detained. I reserve for a separate communication at a future date, a consideration of the Rules applying to Drawbacks on duty-paid goods re-exported to Treaty Ports, as this subject has already been brought under discussion by my letter to the Senior Consul, dated 12th March, No. 349.

With regard to the regulations for the issue of Transit Passes on foreign goods destined for the interior, I have to express the unqualified satisfaction felt by the Committee at the recognition now publicly made by the Chinese Government of the principle for which this Chamber has so long contended; viz. that the commutation of inland duties may be claimed on Imports of foreign origin without reference to ownership.

Rule 3 provides that traders, whether Chinese or Foreign, may convey goods inland under cover of a Transit Certificate, which will be issued on payment of the half duty, as provided by Treaty, and the recognition of this principle removes the main difficulty which has hitherto interfered with the successful working of the Transit system. I need hardly say that the Members of this Chamber are desirous to co-operate with the Native authorities in the adoption of all reasonable means to secure the revenue against fraud and smuggling.

Many of the Rules, however, which the Chinese Government have framed in order to subserve this purpose appear to the Committee to be not only unnecessary and vexatious, but calculated to defeat the object which Transit Certificates are taken out specially to promote. As long as it was held that the right to commute inland taxation was a privilege to be enjoyed by foreigners alone, so long it might not be unnecessary to adopt rules in order to prevent a fraudulent ascription of foreign ownership by native traders; and the nature of the fraud to be guarded against may possibly have called for a practice of inquisitorial declarations which rendered the entire transit system one of very questionable advantage. But the privilege of commutation being now admitted to be one which may be claimed by natives and foreigners alike, the field for the commission of possible fraud is confined within very narrow boundaries, and the regulations may be simplified accordingly.

Before entering into a detailed examination of the Rules which the Yamên propose to adopt it will not be out of place to quote the article of the Treaty, on which the transit system is based and to state the opinion of the Chamber as to the rights which have been created by it.

To His Excellency,

The Honorable FREDK. F. LOW,

United States Minister, Peking.

The 28th Article of the Treaty of Tientsin provides that—

"It shall be at the option of any British subject desiring to convey imports from a port to an inland market to clear his goods of all transit duties by payment of a single charge. The amount of this charge shall be leviable on imports at the port at which they are landed: and on payment thereof, a Certificate shall be issued, which shall exempt the goods from all further inland charges whatsoever."

And the interpretation placed by Lord Elgin upon this provision is shown by his dispatch to the Foreign Office, dated Shanghai, November 8th 1858. He writes—

"Henceforward, on payment of a sum in name of transit duty, which for simplicity's sake has been fixed at one half of the tariff rate of duty, goods, whether of export or import, will be free to pass between the port of shipment or entry to or from any part of China without further charge of toll octroi or tax of any description whatsoever."

And Rule 7 of the Rules and Regulations attached to the Treaty provides that—

"Merchandize shall be cleared of its transit dues under the following conditions. In the case of imports. Notice being given at the port of entry from which the imports are to be forwarded inland of the nature and quantity of the goods; the ship from which they have been landed; and the place inland to which they are bound, with all other necessary particulars, the collector of customs will on due inspection made, and on receipt of the transit duty due issue a transit duty certificate. This must be produced at every barrier station and viséd. No further duty will be levied upon imports so certificated, no matter how distant the place of their destination."

The Committee do not disguise their conviction that it was as much the purpose of the treaty of Tientsin by this article to protect foreign imports from taxation throughout the country other than the customs duty to be levied on entry, and the half duty to be levied on transit, as it was one of the objects of the Commercial Treaty between Great Britain and France to limit the duty on French wines imported into Great Britain to a certain fixed sum per gallon. They therefore consider that on sufficient proof of foreign origin, and of the payment of Import and Transit duty being tendered, a simple stamp should be placed on the packages, in accordance with the general practice of the native excisemen, to denote that the commuted transit duty has been paid, and that the goods should then be freed from further impositions throughout the empire.

The terms of the Treaty are, however, unfortunately so loosely expressed as to admit of an interpretation, which, though opposed to the general bearing of the entire article, is claimed as justifying the Chinese in limiting the operation of the Transit Certificates to the protection of the goods from taxation *en-route* to, and while they remain intact in, a place of destination to be named prior to their departure from the port of entry. In view of this ambiguity therefore the Committee, representing what they believe to be the sense of the foreign mercantile community on this question, and without abandoning the principle for which they have hitherto contended, are not unwilling to accept the instalment of reform offered by the Chinese, provided satisfactory guarantees shall be given that the system of commuted taxation, even in this limited degree, will be faithfully carried out by the Native Government—that is to say—provided the taxes for which commutation is made shall be guaranteed not to be subsequently levied in an indirect or a surreptitious form.

It is practically admitted by the Yamên, in the dispatch under consideration, that the only two conditions imposed by the Treaty upon the owners or carriers of goods transmitted to the interior under the protection of Transit Certificates are, that the goods themselves shall be of foreign origin, and shall be bound for a fixed destination, and it is therefore obvious that rules which are unnecessary to the fulfilment of these two conditions must be deemed superfluous and vexatious or be framed for ulterior purposes.

By this test I propose to consider the regulations suggested by the Yamên.

Rule 1.—Requires that the applicatications for Transit Passes must be made by the merchants who originally imported the goods. This requirement involves great waste of time and trouble; compliance with it may frequently be impossible, and it is wholly unnecessary for the purpose of identifying the goods. The Inspector-General has declared his readiness to recommend to the Yamên the abrogation of a similar condition in the case of applications for drawbacks on foreign imports and the stipulation may be omitted from the regulations regardiug Transit Passes without inconvenience. The Rule further requires a declaration as to the place to which the goods are to be carried and the name of the carrier. The first of these stipulations can only be defended on the ground of its necessity as a means of affording the Chinese Government a reasonable facility for protecting its revenue, but the second is quite unnecessary and cannot be claimed in support of either of the conditions to which I have referred.

Rule 2.—The objections above named as to declarations from the original importer apply equally to the terms of this Rule.

Rule 3.—To this there is no objection to be made.

Rule 4.—Provides for the exhibition of the Transit Certificate at each barrier and duty station along the line of route, to be viséd and stamped, but it goes on to say that if the goods are not on the line where they ought to be, or prove to be other than the goods named in the Certificate, they shall be confiscated and the right of confiscation is claimed by virtue of Rule 7 attached to the tariff of the Treaty of Tientsin. The alleged offences which are to be subjected to so severe a penalty are essentially distinct in character, and must be considered separately. Should the goods covered by the Transit Pass prove to be of a description other than those which are entitled to the benefit of the transit system, that is to say to be of native origin, or if the quantity be found in excess of that named in the Certificate, or if fraud be attempted, or evasion of duty be in any way discovered, then confiscation might be a legitimate penalty. If, however, the discrepancy between the description of the packages in the Certificate, and the goods themselves be merely one of marks or numbers, be otherwise accidental, or involve no evasion of duty, in such cases the penalty of confiscation would be altogether an unjustifiable one, and the Committee suggest that a small fine be substituted for it.

As regards the proposed penalty of confiscation for deviation from line of route, I have to protest against it as being unreasonable and excessive, and not justified by Treaty, there being no fraud involved in such an irregularity. The certificate covers the goods, in the language of the Tariff Rules, "no matter how distant the place of their destination." If, as the Chinese claim, the destination must be fixed, and the goods be freed only along direct lines of route, then the only proper and a sufficient penalty for deviation will be the subjection of the goods to the ordinary levies at the various barriers, which are not cleared by the Certificate, and through which they may pass. Let the case be supposed in which 10 bales of Cottons certificated for Soochow are found *en-route* to Kashing. There would be and could be no fraud intended or practised by such a deviation. The goods would be simply in the position of being uncertificated, and would consequently be liable not to confiscation, but to the payment of the ordinary barrier dues.

In all cases moveover in which it can be shown that deviation has been occasioned by floods, obstructions of an extra-ordinary character, or other reasonable cause, the goods should be exempted from all penalty or extra charges whatever.

The second clause of Rule 4 provides that on the arrival of the goods at the place of destination the certificate shall be handed to the nearest authority, who will fix his seal to it and return it to the consignee as his protection against taxation on the goods so long as they remain unsold. If the certificate be not so presented an additional half tariff duty is to be levied as a fine. The Rule concludes with the strange announcement, that notwithstanding the commutation of the lekin duties, which has already been made, these duties will still be levied by the local government upon the buyer.

It appears scarcely possible that the Chinese Government gravely proposes to accept from the importer a commutation of specific duties, and afterwards to levy these duties upon the buyer of the goods; yet no other meaning can be attached to the last clause, while the unnecessary multiplication of Rules seems as if there were an intention to create offences, and goes far to excite a belief that the Yamên intends to raise from the natives, as soon as the goods shall have fairly passed out of foreign hands, the dues which have been professedly commuted. The intricate nature of these Rules gives rise in fact to a natural suspicion, more or less justified by the action of the authorities in more than one Province, that they have been framed in order that the goods may be carefully traced from the Port of entry to the place of destination, and be subjected through the medium of the ultimate recipient to the payment of all the barrier dues which are supposed to have been commuted.

The Committee see no reason for the stipulation that the certificate shall be surrendered at the place of destination unless it be intended to indicate to the local authorities the name of the consignee of the goods for the purpose of subjecting him to special taxation. The certificates having been stamped at the various barriers will be virtually cancelled, and the provisions for the surrender of them contained in this Rule and in Rule 5 are therefore wholly unnecessary for the protection of the legitimate revenue.

Rule 6.—Appears to refer mainly to uncertificated goods, and in this respect the purpose of it does not seem very clear. The provision that in the event of irregularity appearing in the passes the goods they represent shall be detained at the barrier until communication be had with the Custom-House seems to be a reasonable one.

The Committee conceive that if the Chinese authorities intend to carry the transit system faithfully into effect, the Rules relating to it may be drawn up in a very simple form. The certificate to be issued in payment of the commuted duty should protect the parcel of goods it represents from the port of entry to any indicated place in the interior along a direct route, and at the place of destination so long as the parcel remains intact. Along any other route, when a reasonable cause of deviation cannot be shown or at any other place than those named in the pass, and after distribution the protection ceases, and the goods become liable to *ordinary*, but not special local taxation. The names of the owner, of the carrier, or of the recipient of the goods, should not be given. The certificates being *viséd*, and stamped at the various barriers, and thus rendered ineffective for use a second time there is no valid reason to be given for requiring them to be surrendered.

It becomes my duty to urge your Excellency to withhold your assent to the proposed regulations unless the restrictions and penalties sought to be imposed by them be modified in respect to the various clauses to which I have taken exception, and unless satisfactory and explicit declarations be made by the Chinese Government, in order that no ground for dispute may exist hereafter as to the precise nature of the engagements which have been entered into.

The Transit system, even in its present partially regulated and ill-defined condition, is shown by recent Custom House returns to be working in a progressive manner and with beneficial effect in these Provinces where it finds encouragement from enlightened native administrators. It is worthy of consideration therefore whether it be not better to allow the process already existing to gain gradual recognition throughout the Empire by the force of its inherent excellence than in reality to run the risk of hindering its growth by the promulgation of regulations which in their proposed form I can only describe as crude, ill adapted to the requirements of the system, and vexatious to trade.

I observe that the regulations regarding Transit Passes on Exports have not yet been framed by the Yamên. The Committee are aware that fraudulent irregularities are not uncommon in respect to applications for commutation certificates on native produce which is not a *bonâ-fide* constituent of foreign trade, and they will readily support any reasonable rules which the Chinese Government may find it necessary to adopt for the protection of the national revenue. On the other hand, the illegal exactions of the Provincial Officers are not less notorious. The Committee are of opinion that if the principle of commutation, as applied to inland dues, both on Imports and Exports, is to be settled on a durable and equitable basis, a comprehensive enquiry through the respective agencies of the Consular Authorities and the Custom's Officials, into the working of the present system of Transit Passes, and the practice of barrier taxation, should precede the adoption of any new code of regulations on the subject, and I am to bring this proposal to the attention of your Excellency.

The Committee earnestly desire that the Tsung-li-yamen may be led to see the advantages which will be reaped alike by the Chinese Government and people, and by foreign trade from a scheme of equal and settled taxation. They believe that if when the revision of the foreign Treaties shall again come under consideration, the Imperial Government would accept a first and final payment at the port of entry, which would free foreign merchandize from further taxation throughout the empire, an increased tariff would not be objected to by those interested in foreign trade. The plan of the recent abortive convention between Great Britain and China was unacceptable to the Chamber because commutation of transit duties was made compulsory without adequate guarantees, and its operation was incomplete. The plan which the Committee are prepared to propose of an optional payment to be attested by a simple stamp or certificate which should be in force everywhere throughout the Empire would in the opinion of the Chamber encourage trade, benefit the people, and largely augment the revenue of the country.

I have the honour to be, Sir,

Your Excellency's most obedient humble Servant,

F. B. JOHNSON,
Chairman.

DEPARTMENT OF STATE
RECEIVED
SEP
9
1872

Mr Fish

Ans 2 Oct 14

Ack at here Oct 12

No 172 One Enclosure

Legation of the United States
Peking July 12 1872

Frederick F. Low
to
Department of State

FOREIGN Relations '72

See package marked in note of Li Hung Chang

Subject

Education of Chinese youths in the United States.

States that thirty will leave in July or August; and encloses translation of a note from Li Hung Chang upon the subject.

No 172 One Enclosure

Legation of the United States
Peking July 12 1872

Sir:-

Referring to my No 130 of 5th February last, I have now the honor to inform you that thirty Chinese students with two guardians and two tutors propose leaving Shanghai for the United States on the steamer of the 26th instant or the 12th proximo.

A list of these students is properly

Hon Hamilton Fish
Secretary of State

properly certified by me has been sent to the Vice Consul General. Upon presentation of a list thus certified to the Agency in Shanghai the generous proposal of the Pacific Mail Steamship Company mentioned in my previous despatch upon this subject, can be availed of.

The ages of the students are from ten to sixteen years. Yung Wing, one of the guardians was educated in the United States, he having graduated at Yale College several years ago. His knowledge

of

of our language, and acquain-
-tance in the United States
will greatly facilitate the
making of the necessary
arrangements for the educa-
-tion of his wards. If he
should visit Washington
and call upon you, I bespeak
for him a kindly reception,
such as you would accord
to a gentleman of education
and refinement.

This man has for
some years been urging
upon the native officials with
whom he came in contact
the necessity of foreign edu-
-cation. The importance of

the

the subject has at last
been recognized by the
highest officials in the Empire,
the first fruits of which is
seen in the sending of three
youths abroad to be educated.
This is only the first install-
-ment of the number it is
proposed to send; and if
the initial experiment should
appear to promise success
it is not unlikely the total
number may be increased
much beyond the original
design.

In connection with
this subject I have the
honor to enclose translation
of

of a note from the Viceroy of this province. He, you will observe solicits your kind offices in behalf of the Students; and I beg to supplement his with a similar request of my own.

I shall look with interest to the reception which this modest and humble scheme meets with from our people. If it be generous and cordial, the result will prove of more practical value to our interests here than an increase in the number of our vessels of war.

I am Sir

Your obedient Servant

Frederick F. Low

Enclosure

No 1. Li-Hung-Chang, Viceroy of Chihli to Mr Low

May 30. 1872

Enclosure No 1
Dispatch No 172
Copy

Translation.

On the 1st February 1872, I received Your Excellency's note concerning the sending of Chinese youth to America to study in your schools.

Your Excellency kindly promises to instruct the Consul General at Shanghai correctly as to the names of those who are to go, that he may issue for them a suitable certificate, and that one half the Steamer fare should be remitted them. You express a desire to thus arrange this matter, in order to afford a proof of the mutual friendship of the two nations, and you trust I will not refuse.

In this Your Excellency's unusual interest and desire to assist in a good scheme is seen, and it shall always be remembered with deep gratitude.

Immediately on the receipt of your note, I sent a communication to Tseng Kuo Fan, Superintendent

of

of Trade for the Southern Ports, and we appointed Chen Lan Pin, and Rung Hung (Yung Wing) officers to be in charge of the young persons going abroad, and directed them to deliberate and settle upon a suitable plan. Thereupon Chen and Yung Wing asked leave to go to their homes in Kwantung & to arrange their private affairs & preliminary to their departure, hence the long delay in my reply.

Rung has already returned to Shanghai, and Chen will be back at no distant day. Selection of the bright and intelligent lads who are to go abroad has just been made, and, I think, that in the Autumn of the present year, the first installment will leave. Yung Wing has already been in American schools and understands their methods thoroughly. I have commanded these two officials to plan & together at Shanghai with the

American

American Consul General, and when the time for their departure shall have come, to send the names and number of the students to the Consul General by him to be forwarded to Your Excellency that you may issue a suitable certificate, which these two officials may take with them.

On the American Steamers there is a fixed rate of passage, and the Chinese Government in sending these persons abroad is particular about this matter, and of its own ~~thought~~ would be unwilling to pay less. Only let the officers of the Steamers be particular to regard their wants, and it is unnecessary to direct them to reduce the fare.

But in your letter appears the statement that on a certificate from Your Excellency the fare would be reduced one half. If hitherto there has been a rule for such a reduction, then certainly the said officers should accept

the

the favor. If there has been no rule for such a reduction, it is not fitting that because of our friendship with Your Excellency, the Steamship Company should suffer loss. In this point the deep and sincere friendliness of Your Excellency is even more appreciated and trusted in by us. The fares, tuition and current expenses of these students will all be taken charge of by Chen and Yung Wing.

I would again request your Excellency to send a note to the American Secretary of State, that when these officers and students shall have reached your country, he will, in whatever circumstances they may be, kindly have a care and protection over them.

I trust that thus the students will make constant progress, and become thoroughly proficient in Astronomy, Geography, Arithmetic and Mechanics,

and

and that they may not disappoint the great hopes entertained by the Tsung li Yamen, Prince Kung, and myself.

In making this reply I take the opportunity to wish Your Excellency the compliments of the day.

30th May 1872.

Card of Li, Viceroy of Chihli.

Ltr

Ack'd 20 Sept

Mr Frost

No 173

DEPARTMENT OF STATE RECEIVED SEP 20 1872

DEPARTMENT OF STATE RECEIVED SEP 20 1872

Legation of the United States

Peking July 20. 1872

Frederick F. Low

to

Department of State

Subject

Reception of Department dispatches.

Acknowledges receipt of No 79. 80, 81. 82 and 83.

No 173

Legation of the United States
Peking July 20. 1872

Sir:-

I have the honor to acknowledge the reception of your despatches numbered 79. 80, 81, 82 and 83.

The instructions contained in Nos 81 and 82 will receive attention without loss of time.

I have the honor to be
Sir,
Your obedient Servant
Frederick F. Low

Hon Hamilton Fish
Secretary of State

Ref

Report about
consulate at
Chefoo 12

Ack 18 Nov

No 174

Legation of the United States

Peking August 1. 1872

Frederick F. Low

to

Department of State

Subject

Changing Chefoo from a Consulate to a Consular Agency.

Recommends that Chefoo be attached to the Tientsin Consular District.

Delegates of the United States
Planning Organization
(Washington St Louis)

Department of State

Washington

Subject:

(Planning Letter)
Plan to Consult the Con-
sulates Department.

Reference to Past (Letter)
Outlined in this Statement
Consulate Letter.

No 174

Legation of the United States
Peking August 1st 1872

Sir:-

If I am correct in supposing that Congress at its last session made provision for maintaining a salaried Consulate, and provided for the employment of a competent interpreter, I have the honor to renew the recommendation made some months since, that Chefoo be attached to that Consular district.

How Hamilton Fish
Secretary of State

A Consular Agent could attend to all the current business at Chefoo; and when legal or other questions of importance came up the Consul could go there and adjust them.

The communication between Tientsin and Chefoo is regular, frequent and easy during nine months of the year; and the expense of the Consul going to and from, as often as circumstances would require, would be small.

When navigation is closed there is little Consular business

business to be transacted.

The files of the Department contain abundant evidence of the necessity of dispensing with Merchant Consuls in China wherever it can appropriately be done with due regard to economy. In the present instance the change recommended would be advantageous in many ways; it would also be gratifying to the Chinese, who especially deprecate having their law cases go before a Merchant Consul.

I have the honor to be,

Sir,

Sir,

Your obedient servant

Frederick F. Low

REPORT.

SUBJECT: Consulate at Chefoo, China; Recommendation of Minister Low to reduce the Consulate to an agency under Tien Tsin. Commerce of Chefoo.

REPLY: The Consulate at Chefoo was established in 1863. The first appointment was that of Mr. Franklin Knight whose Commission bore date February 19 1863.

Mr. F. F. Low, Minister to China, in his despatch No. 106 dated November 24, 1871, reports a law suit having arisen between Mr. Holms and a Chinese merchant.

Mr. Low recommends that the Consulate at Chefoo be made a salaried office or be reduced to an agency under Tien Tsin. He also recommends the abolition of Merchant Guilds in China, as far as practicable, as in the event of law suits arising between a merchant Guild and

Low to Dept. 6. Nov 24. 1871

REPORT.

~~SUBJECT~~: a Chinaman ate Onehunga is glad ate judge of his own cause.

In his No. 107 dated November 26. 71. Mr. Low states that he has learned of ate appointment of Mr. M. C. Holmes as Consul at Okee Foo. and requests that his Commission be withheld until ate law suit in which Mr. Holmes is interested shall be tried or otherwise settled. as

~~REPLY~~: ate Chinese authorities will believe that ate appointment was made in order that he might prosecute ate suit with more efficiency. The Commission was accordingly withheld.

Commerce of Okee Foo.

The reports on Navigation and Commerce show that ate ~~number~~ American vessels entering and clearing from ate port of Okee Foo for ate years 1864. 1866 and 1867 was as follows;— (Total for three years)

Entered		Cleared	
No. of vessels	Tonnage	No. of vessels	Tonnage
109.	71.347	109	71.216

REPORT.

~~SUBJECT~~: The value of the whole trade of the Port for the years 1866, 1867, 1868 and 1869 was Taels 2,849,627.

For the year ending September 30, 1870 there were

Entered		Cleared
No. of vessels. 120		No. of vessels. 132
Value of cargoes. $1,945,468		Value of cargoes $1,841,906

~~REPLY~~: If there is made an exports it would appear to be within the jurisdiction of the Consulate at Tien Tsin. from which it is distant in an air line about 250 miles.

~~Respectfully submitted~~

~~Chief of Bureau.~~

~~Post Office Bureau~~
~~November 1, 1871.~~

(over)

The fees collected for the year.

1867	— were	$ 544.40
1868	—	718.02
1869	—	746.46
1870	—	598.13
1871	—	495.62

The compensation of the Consul is the amount of fees collected.

It seems to me that the statements of Mr Low, as to the relation of the Consulate to that at Yen Tsin, the ease and regularity of communication, and the comparatively small commercial importance of the Consulate, indicate that the public service would not suffer by reducing the Consulate to an Agency under Yen Tsin.

Respectfully submitted

A. B. Wood

Shanghai 4 Oct. 1872

Ack Dec 14

Ent

ack

DEPARTMENT OF STATE RECEIVED OCT 10 1872

Wm Pratt

No 175 2 Enclosures

Legation of the United States
Peking August 4. 1872
Frederick F. Low
to
Department of State

Subject

Opinions of Shanghai papers on American diplomatic correspondence.

Encloses two editorials of the "Shanghai Daily Courier"

No 175 2 Enclosures

Legation of the United States
Peking August 4. 1872

Sir:-

In accordance with their usual custom, the Shanghai newspapers are republishing and reviewing the diplomatic correspondence for 1871, relating to China.

I beg to enclose two editorials upon the subject, clipped from the "Shanghai Daily Courier".

One of these notices Hon Hamilton Fish in Secretary of State

in general terms the volume of correspondence, mentions approvingly the reply to the missionary circular of the Yamen, reserves judgment upon Mr Seward's review of the causes of the Tientsin massacre, and criticises rather severely the work of the government Printer; the other is devoted exclusively to reviewing my despatch of January 10 1871, which is denominated an "Essay upon China"

From the tenor of the latter it is reasonable to infer that enquiry by foreign

foreign Ministers into the political, social and economical condition of China does not meet the approval of the local newspapers. The reason for this is not apparent. The writer of the editorial under review admits that the dispatch upon which he comments is "one of the "ablest that has yet appear-"ed"; nor does he attempt to controvert any statements of fact excepting a single particular, the correctness of which I am not prepared to admit.

18

No doubts whether merchants and missionaries are in favor of the forcible policy for opening up China — because he has not met either "who avowed such a policy". But whether this is "avowed" or not is of small consequence. The statement, the correctness of which is questioned, was made eighteen months and more ago, the accuracy of which I am even more certain about now than when it was made.

If the exact truth could be known it would,

I

I expect, be found that the chief objection to impartial enquiry into the internal condition of China is the opium question, which will hardly bear the test of candid examination. Instead of finding it a "healthy stimulant, neces-
"sary for the Chinese"* the conviction is irresistibly forced upon those who are not interested either pecuniarily or nationally in the growth and sale of the pernicious drug that

its

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* Extract from Sir R Alcocks evidence before a Parliamentary Comtee

its consumption by the Chinese has proved disastrous to Chinese progress and ruinous to the prosperity of her people.

At the risk of incurring the displeasure of the local pup I shall continue to prosecute my investigations ~~into~~ with reference to the internal economy of this Empire, the result of which together with such suggestions as may seem appropriate, will be given to the Department from time to time.

I

I have the honor to be
Sir,
Your obedient servant
Frederick F. Low

Enclosures

1. Editorial cut from "Shanghai Courier" July 15/72
2. Editorial from "Shanghai Courier" of July 20/72

Enclosure No 1
Despatch No 170

Shanghai Courier July 20/72

THE HON. F. F. LOW'S ESSAY ON CHINA.

It has become a well-established practice among the Foreign Ministers at Peking to deliver themselves periodically in the form of Essays. That peculiar kind of despatch which was happily characterised some time ago as "retrospective and prospective in its tenor" has become naturalised in the Northern Capital. The authors of these compositions go back to the dawn of history in search of the first glimmer of the light of Chinese civilization, and they reach forward to an unknown future when the existing order of things shall have passed away. By no less comprehensive a process do the Ministers seem able to arrive at a just estimate of the actual situation. Their circumstances are full of mystery and contradiction, which they can only hope to penetrate and reconcile by making an exhaustive study of the whole subject from the beginning of time to the consummation of all things; and it is to the intense desire of the Ministers to unravel for their Governments the perplexing anomalies which beset their position, that we owe these valuable Reviews of Chinese polity in which the official correspondence from China is so rich.

Mr. Low's Essay on China which we have reprinted this week is one of the ablest that has yet appeared. "Time, observation and experience seemed necessary to enable an impartial judgment to be formed with reference to a country and people about which there are so many antagonistic theories and diverse opinions as there are in regard to China and the Chinese"—and accordingly Mr. Low allowed himself a year in the country before committing himself to "the prevailing opinions and prophecies current" in Peking.

The Chinese constitution Mr. Low finds to be a mixture of extreme despotism with extreme democracy. Tracing the chain of authority from the Emperor downward, "nothing is seen but irresponsible power;" but, beginning at the bottom and tracing the influence of the people upwards, you find that "the officers are guided to a great extent by the will of the governed." In theory, the Government of China is the strongest on earth, while in fact it is "weak, amounting to feebleness." Such are some of the conclusions which Mr. Low has worked out from his observation and experience; but they are stated in such open and general terms as to elude contradiction on the one hand, and to fail to carry conviction on the other. According to some authorities the Chinese Government is not weak where it chooses to be strong; and it has been so grievously suspected of feigning weakness, or of having weakness attributed to it by officious friends, for the convenience of escaping from its responsibilities to foreigners, that it would be interesting to have in more detail the data on which Mr. Low founds his opinion.

On the familiar topic of official corruption Mr. Low expresses lenient views. "The humblest person in the empire, if fitted by education, is eligible to the highest office below royalty," and Mr. Low adds, "this rule is adhered to with a strictness and impartiality that would be highly creditable in any nation." There is immense significance in the *IF* here. How is it possible for the "humblest person" to fit himself by education? Even if the examinations were conducted with that absolute impartiality which Mr. Low claims for them, a liberal education would be out of the reach of any really poor person, unless some benevolent and wealthy neighbour undertook his support the while. But Mr. Low assumes a great deal with regard to these examinations. Memorials from Chinese literati have again and again been published, deploring the corruption that prevails at the provincial examinations; and in the face of such confessions it is not easy to accept, without reservation, Mr. Low's assurance that "equal and exact justice is substantially done" to the candidates for literary honours.

The "sale of offices for gold" is, we should say, much more common than Mr. Low supposes. The "times of great financial distress," when alone this expedient for raising money is resorted to, are almost chronic. But we are quite of Mr. Low's opinion that it is rank, rather than office, which is sold in the open market; and we think it can scarcely be denied, explain it how we may, that, according to their lights, the Chinese officials who reach the higher grades are, as a rule, remarkably able and accomplished men.

A large class is, according to Mr. Low, formed out of the plucked candidates for literary degrees, commonly known as the "literati and gentry;" and to this class Mr. Low assigns the task of standing as buffer and medium of communication between the officials and the peasantry, and of "creating the public opinion of the country." With all this, however, Mr. Low does not appear to think the people have any real safeguard against oppression; for he tells us that "rebellion is the only mode left to the people to redress their wrongs," an opinion which seems hardly consistent with the alleged fact that the officers are to a great extent governed by the popular voice.

Of the honesty and truthfulness of the officials and common people Mr. Low makes short work. "The arbitrary power vested in the officials appears to render falsehood necessary on the part of the people," while "the desire for dishonest gains on the part of the officials compels them to use subterfuge to escape untoward results." One section only of the people is free from these necessary iniquities, namely "the trading and mercantile classes" among whom "more honor and honesty is to be found than among similar classes in any country." That the Chinese appreciate and practice commercial morality up to a moderate standard is a well-attested and generally received fact, but we cannot assent to the arbitrary division of vast classes into honest and dishonest; and the hard and fast lines laid down by Mr. Low do not increase our confidence in the soundness of his general deductions.

Among the obstacles to improvement in China Mr. Low instances the educational treadmill, the difficulty of the language, and the ineptitude of the Chinese for acquiring foreign tongues, the rapid decay of the Manchu dynasty, and the use of opium. The last-named habit appears to Mr. Low the most potent of all the causes of the ruin of China, because it demoralises the mass of the people; and he evidently deems the most certain cure for the evil to be the opening up of the country and the development of new fields of mental and physical activity.

How this is to be brought about next occupies Mr. Low's attention, and he takes some pains to prove that it is to be done not by violence but by gentle suasion, and gradual instruction;—a work in which he looks on the missionaries as the most important agents. There is an alternative method, however,—*for e*,—which, Mr. Low intimates, is advocated by merchants and missionaries as the only way of opening up and improving the country. In this view we believe Mr. Low to be mistaken; at all events, it has not happened to us to meet either missionary or merchant who avowed such a policy. They may, like Mr. Low himself, "have little hope, and no real expectation that peaceful relations will continue;" but, to borrow a homely illustration lately used with telling effect by Lord Derby "to warn a man that if, he persists in leaving his door open, he will be robbed, is quite a different thing from inciting to robbery." In connection with the admission of foreigners and their machinery into China, the antagonism of race which has wrought such sad consequences in his own country was naturally present to Mr. Low's mind. We are far from denying the existence of this antagonism between foreigners and Chinese; it exists between every two races, how slight soever be their points of difference; but, apart from the immense superiority of the Chinese in calibre to Red Indians or Negroes, their numbers alone are sufficient to protect them from any such result of foreign contact as has happened to the aborigines of North America. There is virtually no analogy between the cases.

Not the least curious feature of Mr. Low's Review is that when he approaches the really practical part of his subject—how he, as Minister of a first-class power, should best perform his functions,—we find him leading off into remote regions of speculation. A hypothetical *post-mortem* of the Chinese empire is solemnly gone through as if it had a direct bearing on the policy of the hour. What foreign Government would conquer China and hold it as a dependency? How is the territory to be divided among the various claimants? Ominous questions of that sort demand consideration before foreign nations take a part in the "overthrow of the present effete dynasty." These grave discussions in connection with the duties of a foreign Minister derive a peculiar interest from the school whence they come. One of the characteristic foibles of Foreign Ministers to China is to carry about with them the whole responsibility of the Chinese empire. With nothing less than the fate of 400 millions of people always trembling in the balance, the acts of the foreign representatives may well be inexplicable to the common observer. "What are you going to do with the empire when it crumbles to pieces on your hands?" is an ever-ready answer to any rash demand to have the Treaties observed.

Sent to China in the honourable capacity of diplomatic representatives of their respective countries, the Ministers, failing for the most part in their own proper sphere, begin to busy themselves with vast programmes for the conservation of the Chinese autonomy, or for the division of the spoil. The partitioner, of course, meets with no sympathy, and the scheme for dividing China into two unequal portions, with the Yangtze to do duty for the English Channel and Straits of Dover, naturally fell dead. But the amateur conservator of China plays a nobler *rôle*, and on that very account exercises a greater power for evil than the other. Deeming the apparent interests of his country vulgar or evanescent, he fills his mind with magnificent conceptions of a dim and unfathomable future; he grapples with complex conditions of national life, the simplest of which are above his comprehension, and, like the astronomer in the fable, while gazing intently on the heavenly bodies, he is but too apt to stumble over a stone or fall into a well. Dreams of the ultimate destiny of a third of the human race have led more than one Minister far astray. Many instances might be given, but perhaps one may suffice:—

Lord Elgin's ear, as is well known, was accustomed to the warning "You will dismember the empire if you don't take care," and in a weak moment he listened to the sound. After securing, by his first Treaty, the right of holding direct diplomatic relations with the Court of Peking, Lord Elgin was persuaded to waive it on the ground that, as he wrote to Lord Malmesbury, "it may be worth consideration whether or not these advantages can be secured without resorting to a measure which, in the opinion of the Chinese, would shake the stability of the Empire." The immediate consequence of that mistaken effort to conserve the Empire was, as we know, the landing of a foreign army on the plains of Chihli, the capture of Peking, the sacking of Yuen-ming-yuen, the ignominious flight of the emperor—which cruel irony of facts all occurred within two years of Lord Elgin's sacrificing the immediate interest of his own country for fear—as he himself expressed it—"of impairing the Emperor's prestige!" This episode carries two lessons for those who care to learn them. First, that no man, however able, can serve well more than one master at a time. Second, that until we know more about China her conservation had best be left to those whom it concerns.

It is much to the credit of Mr. Low's sagacity that he has passed through this transcendental stage of diplomacy without permanent intellectual injury. He has soared into the clouds like his neighbours, and become confused and bewildered, but he was soon satisfied of the vanity of the nebulous theory, and returned to *terra firma*, where we are glad to welcome him. His day-dream over, Mr. Low states the conclusion of the whole matter in these sober words: "I am of the opinion that foreign nations in their intercourse with this government and people should pursue a just and firm course . . . . They should insist upon the due fulfilment of treaty engagements." These are words of wisdom, and we conscientiously commend them to the attention of the foreign ministers as the best specific yet discovered for "preserving the Empire."

Enclosure No 1
Despatch No 175

From Shanghai Courier July 15/72

THE UNITED STATES DIPLOMATIC CORRESPONDENCE 1871.

We have been favored with a copy of the Annual volume published by the United States Government, of "Papers relating to the Foreign Relations of the United States, transmitted to Congress with the Annual Message of the President, December 4th. 1871." The papers are arranged according to the alphabetical order of the names of the countries with which diplomatic relations are maintained, beginning with Austria and ending with Turkey, the whole forming a goodly 8vo. volume of 910 pages. But notwithstanding the bulk of the book and the multiplicity of matters with which it deals, reference to every document it contains and to every subject of which it treats is rendered easy, by a synoptical list of papers and an alphabetical index of persons and subjects.

Our attention is naturally drawn, first and chiefly, to that portion of the volume which relates to China, and which we find extends to 160 pages. Beginning with Oct. 25th, 1870, we find that all the documents for the remainder of that year relate to the punishment of the Tientsin rioters; the payment of compensation for damages sustained by American citizens; and the means used to prevent a popular outbreak when the sentence of the rioters was carried into execution. A single short letter tells what Mr. Low had done by way of preparing for the expedition to Corea.

In January, 1871, Mr. Low sends to the Department of State a lengthy and elaborate Essay, in which he enquires into the social and political organization of China; reviews its relations with the peoples and governments of other countries, and speculates on its possible future. This is a very valuable and suggestive document. During February, March and April the papers refer to the return of the missionaries to Tungchow; the proposed revision of the French Treaty and Mr. Low's views of the French demands; the Missionary Circular of the Tsung-li Yamen and Mr. Low's reply thereto; and a translation of a Memorandum from Chinese labourers in Peru seeking the appointment of a Chinese Consul at Lima, or, failing that, to be placed under the protection of the U. S. Consul at that port.

From May to September the correspondence is almost exclusively occupied with the Corean expedition, with almost all the particulars of which the public is already familiar, though some of the original documents, especially the despatches received from the Coreans, will be found interesting. On his return to Pekin, Mr. Low resumes the consideration of the Missionary question and finds the views he propounded in March to the Chinese, approved by his Government. The next 30 pages of the volume are occupied with what is very properly indexed as an "elaborate review of the causes of the Tientsin riots." This is written by Mr. Geo. F. Seward, U. S. Consul-General at Shanghai, who after a general introduction, proceeds to indicate the complex causes of the riots as, First: The general elements of hostility to foreigner —(*a*) prejudices of race; (*b*) Chinese ignorance; (*c*) differences in religion; (*d*) the Opium Trade; (*e*) the temper sometimes exhibited by foreign officials and others; (*f*) the utterances of the foreign press; (*g*) priestly interference with women. He then goes on to deal with, Secondly: "The special circumstances of an exciting character which were present and active at Tientsin." These he states at great length, quoting documents most of which have appeared in this paper. Having, under these two heads, established certain principles, he proceeds to apply them to the conduct of the Chinese people and the local authorities, and to pronounce upon the measure of their guilt. We shall not now express any opinion as to Mr. Seward's success in the arduous task he undertook. We hope to have an opportunity of doing so more at length hereafter. But we must not refrain from saying that the document is written in a thoughtful, statesmanlike and judicial style, and will well reward perusal.

The remainder of the Chinese portion is occupied with documents relating to the coolie trade between Macao and Peru. In the last document but one, Mr. Low recommends the establishment of a school at Peking, and an appropriation from the Chinese Indemnity Fund for its support. Finally, he recommends a salaried Consul at Tientsin.

It will be evident that the student of public affairs in China will find here much matter for careful perusal and reflection, and we purpose from time to time to reproduce such of the documents as are of special interest, or seem most likely to be of permanent value. We begin to night with Mr. Low's reply to the Tsungli-yamen's Missionary Circular, the substance of which was been published, but which seems to us so admirably put, that we think it would be a loss to our readers if we did not give them an opportunity of perusing it in its entirety.

We have just one fault to find with the volume before us. It is very incorrectly printed. It is not to the credit of the "Government Printing Office" from which it emanates, to find Tungchow printed as *Fungchow*, Tungchi as *Fungchi*, Tsung-li Yamen as *Tsungli-yamen*; secretaries as *secretaries*, particularly as *practically*; and so on, hardly a page being free of such blemishes. A document issued by Government, and which is to be quoted as authoritative, ought to have a text as nearly as possible immaculate. British Blue Books are also defective in this particular, but we do not remember to have met one so inaccurate as the volume now under notice. In the names of places, titles, etc. peculiar to China, an excuse may be found for errors on the ground that home printers and officials cannot be supposed to know the spelling of these, apart from a manuscript written with perfect plainness, which few official manuscripts are. But it is just in such words that accuracy is most important; and surely there is always some China hand accessible who could be appealed to when there was any sense of doubt as to what was correct.

Adv Gen'l — W Pratt

Ack

No 176

Legation of the United States.
Peking August 5 1872
Frederick F. Low
to
Department of State

Subject

The Conferring of rank on the native Teachers and Professors in the Peking College.

States that the Peking Gagetto contains memorials of Prince Kung praying

the Emperor to confer on those people official rank. Thinks this will popularize the institution and weaken the opposition to it. Refers to the change of tone of the Shanghai Press in regard to the sending of Chinese youth abroad to be educated.)

No 176

Legation of the United States
Peking August 5 1872

Sir;-

The Peking Gazette a few days since, contained several memorials by Prince Kung praying that official rank and titles be conferred on the native professors and teachers in the Peking College, of which Dr Martin is President.

Such

Hon Hamilton Fish
Secretary of State

Such a recognition by the Government of these people will be of great benefit to the institution.

Heretofore all efforts to afford the advantages of a foreign education to native youth have been strenuously opposed by the mass of the officials and the people; hence any tangible token of Imperial favor to those engaged in the work will tend to popularize the college and weaken the force of the opposition.

It is also gratifying

to

to note a change in the tone of the newspapers at the Porto with reference to the educational scheme which is about to be inaugurated in the United States. When the project was first mooted it was treated with ridicule by the local press; now it is regarded as one of the promising signs of progress.

This, however, not impossible that the editors may again change their minds, and be less sanguine of the beneficial result to come from

from the movements, if all the scholars are sent to the United States and none go to Europe,

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

Ack: Approves the action of U.S. Consul at Tientsin in requiring bonds as a security for peace

Encl Acknl

DEPARTMENT OF STATE RECEIVED OCT 10 1872

Dd as W. Hall 4 Jany No 119.

Oct 14

No 177 One Enclosure

Legation of the United States
Peking August 7. 1872
Frederick F. Low
to
Department of State

See No 166

Subject.

Kidnapping case at Tientsin.

Encloses copy of a despatch from the Tientsin Vice Consul; and refers to this case as proof of the correctness of former opinions.

No 174 One Enclosure

Legation of the United States
Peking August 9. 1872

Sir:-

I have the honor to send herewith copy of a despatch from the Vice Consul at Tientsin, concerning a Kidnapping case which recently occurred there.

The popular excitement which the discovery of the child gave rise to, and the summary manner How Hamilton Fish in Secretary of State

in which the extreme penalty of the law was inflicted on the Kidnapper, are noticeable features in the case; they furnish confirmatory evidence of the correctness of the opinions expressed in previous despatches:— that the Kidnapping and Sale of children, while it is not of infrequent occurrence among the lower orders, is reprobated by the better classes; and that persons found guilty of such practices receive no mercy at the hands of the officials or the people. The purchasers

of

of stolen children are, according to Chinese law, regarded as *participes criminis*, the punishment for which may extend to strangulation;— a punishment only one degree less ignominious than decapitation.

In view of these facts it has seemed to me that foreign residents could not exercise too much care. No reasonable ground for suspecting that they promote kidnapping should be furnished; and when

the

the evil disposed
invent and circulate
such false reports no
effort should be wanting
to disabuse the minds of
the ignorant and super-
stitious masses of such
impressions. This I
have endeavored to impress
upon our people, and
particularly upon the
missionaries, who are
more likely to fall under
suspicion than any other
class; this is my chief
objection to the policy
of exacting indentures
for the native scholars

in

in attendance upon the
Mission schools.

That the Management of Romish Catholic Orphanages does lead the masses to honestly believe that the inmates of those institutions are recruited mainly by Kidnapping few people disconnected with the Churches will deny nor have the official denials, made since the Tientsin massacre, had the effect to disbelief this settled conviction of the people. Like causes produce, in China as

in

in other countries, like effects; hence it would not surprise me to hear that a repetition of the Tientsin tragedy had occurred at some place where a Romish orphanage is located.

I may add that ~~that~~ the proceedings of Vice Consul, detailed in his dispatch, have been approved; and he has been instructed to request the Tsungli to issue the proclamation suggested. He is also to suggest to the Agents

of

of the Steamship Company
the propriety of posting
notices in the City notifying
the publick that Kidnapping
is discountenanced, and
that care will be taken
by its officers and agents
that no stolen children
are transported on their
ships.

I have the honor to be
Sir,
Your Obedient Servant
Frederick F. Low

Enclosure
No 1 Mr Meadows to Mr Low
July 29. 1872

Enclosure No 1
Dispatch No 177

United States Consulate
Tientsin ~~29th~~ July 1872

Hon Fred^k F Low
US Minister
Peking

Sir,

I have the honor to ~~report~~ make the following report to your Excellency for your information.

On the afternoon of the 23^d instant Mr M.G. Moore, representative at this port of the American firm of Messrs Russell & Co, called at the Consulate to report that about an hour before a Chinese woman with a child about four years of age came to his office and told him that one of her children, a boy six years of age, had been kidnapped two days previously; and that she had since learned from a barber that her child was

on

on board the American Steamer "Shawee", ~~about~~ to sail on the following day. Later Mr Moore repaired on board the Steamer "Shawee", and sure enough found the woman's child there in the hands of one of the Canton sailors, employed on board, who said he had bought the child for eight dollars from a Tientsin man. He caused the child to be returned to its mother at once; and the child on seeing its brother who came with its mother, at once rushed into its arms and they both began crying. After this act Mr Moore noticed a crowd of over three hundred collected on the Bund. He then came on to the Consulate and told me of the affair. I advised him at once to cause the master of the Steamer to send the

the Cantonese sailor to the
Consulate to be forwarded
to the Chinese authorities to
be dealt with according to
law; to show to the Chinese
population that the Americans
connected with the Steamer,
either on shore as her agents
or on board as her officers,
gave no countenance to the
conveyance of human beings
stolen from their parents to
or this port, in American
vessels, such being contrary
to the laws of the United States,
as well as those of China.
Mr Moore shortly repaired
on board, and a few minutes
later the mate of the "Shawmut"
handed over to me the Canton
man in question. A little
later the rest of the Canton
men on board handed over
to me the Kidnapper of the
child - a Tientsin man

employed

employed as a cook at the Tszchuhlin village, and a man of very bad character, as I learned from my Tientsin men. I now addressed the Customs' Toutai, the Chinese official with whom the Consuls transact their official business principally, asking him to send a police force to the Consulate as speedily as possible to take charge of the two men; informing him at the same time of the charge made against them. In the mean time I had the men put in irons and locked up in an empty building. On the Toutai's police force appearing and bringing a note in reply, and asking me to deliver the men I had them brought out and handed over to the police.

On

On the woman's missing her child she had notices put up all round the City and suburbs; and a barber who went on board the "Khansa" to follow his occupation, noticed the child, and having seen the notices put out ~~suppressed~~ suspected, at once knew that the child he saw on board was the missing child; and on going on shore went to the woman's house gave her information of his suspicion; and on giving a description of the child the mother at once recognized her son. She accordingly at once proceeded to the house of Mr M G Moore and claimed her child.

The Customs Douane has informed me this forenoon of the examination of the two men and of the Viceroy's order

order to execute the Kidnapper
in accordance with the law.
The Kidnapper named Keang-
Choo was decapitated on the
forenoon of the 27th instant
at the public execution ground
outside the west gate.
According to Chinese law
the Cantonese, through his
inducing the Teintsin man
Keang Choo to procure him
the child was liable to be
strangled to death, and the
Viceroy had given orders to
the District Magistrate to
punish the Cantonese accor-
-ding to the extent of his crime.

I do not yet know
how he will be dealt with
but I fancy he will be
transported to some distant
region of China, and by the
use of some money he will
soon be restored to his home.

I am of the opinion

that

that it would be well that the Customs Toutai should be asked to issue a proclamation to tell the people that Americans do not countine at the purchase of children, such being contrary to American law.

Of course if Li Hung chang could be induced to issue such a proclamation it would be more effectual for the object I have in view.

I am, sir

Your obedient Servant

(Sgd) John A. T. Meadows

U.S. Vice Consul

Sub Adv Court Act

W. Pratt

No 178

Legation of the United States
Peking August 9. 1872
Frederick F Low
to
Department of State

Subject.

Arrival of a new French Minister.

States that M Geofroy has reached Peking; and gives a list of the Secretaries, attaches &c in French Legation.

No 178

Legation of the United States
Peking August 9. 1872

Sir:-

M Geofroy, the new French Minister, accompanied by a large suite reached Peking last week. He arrived at Hong Kong in May last in the French mail steamer; from there he came north in the French corvette "Lionne", visiting Swatow, Amoy, Foochow, Ningpo, Shanghai, Chefoo and Tientsin en route

How Hamilton Fish With Secretary of State

With the recent additions to the force the French Legation now contains, besides the Minister,
One First Secy of Legation
one Second do
one attache
one Military attache
one Chinese Secretary
one Assistant ditto
one Senior Student
one Junior Student
one Surgeon, and
Nine Gens d'armes, who act as escort to the Minister.

It may be doubted whether the business of the French

French Government requires such a force of assistants; it is to be inferred, rather, that the design in sending such a large representation is, mainly, for the influence they will exert upon the Peking Government. Undoubtedly a respectable, even ostentatious, display by the foreign Legations has now or has effect, particularly upon Orientals, but whether the present formidable array will have the effect to impress the Chinese Government with the greatness and power of France over

and

over and above those nations less pretentiously represented here, is by no means certain.

And while it is painfully evident to me that our interests and influence suffer from the disinclination of the Government to provide for its representative in China suitable surroundings and assistants, I should not be inclined to favor an establishment which would rival that of our sister Republic, France, although American interests

interests, and the current work of the Legation are ten fold, probably, those of the French.

I hear the new Minister well spoken of by all who know him. His appearance indicates that he is a man superior to most of the French representatives in China that have preceded him.

I have the honor to be

Sir,

Your obedient Servant

Frederick F. Low

Enclosure to War Dept 2 Nov 1872

Mr Bergdam

DEPT OF STATE RECEIVED NOV 1 1872

No 179 Four Enclosures

Legation of the United States
Peking August 15 1872
Frederick F. Low
to
Department of State

Subject

Acknowledging the receipt of Department dispatch.

Encloses four Copies of medical statistics which had been requested.

No 179 Four Enclosures

Legation of the United States
Peking August 15 1872

Sir:-

I have the honor to acknowledge the receipt of Department dispatch No 84 of 18th June; and, in response to the request contained therein, I beg to send herewith two copies each of the "Customs Gazette" Nos 10 and 11, containing Medical Statistics of the Treaty Ports

and

Hon Hamilton Fish
Secretary of State

and Capital of China.

I have the honor to be

Sir,

Your Obedient Servant

Frederick F. Low

Enclosures

No 142 7 Copies Customs Gazette No 10

No 143 2 Copies Customs Gazette No 11

Ackn[illegible] Ack'd

Mr. Burlingame

No. 180 One Enclosure

Legation of the United States
Peking August 19 1872
Frederick F. Low
to
Department of State

Subject

Mr Consul-General
Serrano despatch concerning
the causes of the Tientsin
Massacre.

Encloses an editorial from
"Shanghai Courier" upon the subject.

No 180 One Enclosure

Legation of the United States
Peking August 19. 1872

Sir:-

I have the honor to enclose an editorial cut from the "Shanghai Daily Courier", in which Mr Consul-General Seward's despatch to the Department concerning the causes of the Tientsin massacre is reviewed.)

This editor's aversion

How Hamilton Fish
Secretary of State

aversion to independent
enquiry, and investigation
into Chinese affairs seems
to apply to Consuls as well
as Ministers.

I have the honor to be
Sir,
Your obedient Servant
Frederick F. Low

Enclosure

No 1 Comments of Shanghai
Courier upon Mr Seward's
despatch concerning
causes of Tientsin
Massacre

Enclosure No 1
Dispatch No 180

From Shanghai Courier Aug 6. 1872

MR. GEO. F. SEWARD ON THE TIENTSIN MASSACRE.*

UNDOUBTEDLY Mr. Seward had some good purpose to serve in re-opening the discussion on the Tientsin Massacre, but the perusal of his lengthy despatch on the subject has failed to reveal to us what that purpose is. Were Mr. Seward a philosophical essayist, removed by a happy combination of circumstances from the thorny ways of active life, his point of view would be intelligible, and his disquisition on the events of 1870 would be read with pleasure as an intellectual recreation. Unfortunately, however, we cannot dissociate the writer from the Consul-General, nor forget that the facile theorist is the official representative of a people who have an active part to play in the scenes which he contemplates from so sublime an elevation. It is no casual traveller, privileged to sum up the gist of human affairs in a few pages of epigrammatic generalisation, no anonymous magazine writer whose lucubrations we read and put aside, but the U. S. Consul-General in his official capacity, who, fifteen months after the event, volunteers to tell his government something about the Tientsin Massacre, and we have a right to expect that it shall be worth the telling.

MR. Seward subjects the outbreak of 1870 to a thorough scientific investigation; searches out its various and complex causes, and shews it to have been the result of certain natural laws which are constant in their operation. So far from being surprised at the occurrence, therefore, Mr. Seward seems to think that nothing was more likely to have happened, and that, as history repeats itself, so a recurrence of the tragedy of Tientsin may be expected in the ordinary course of things. What Piddington did for the law of storms, Mr. Seward has partially done for the law of massacre. You cannot, indeed, as yet predict the exact time for the appearance of a massacre, any more than you can with certainty foretell a cyclone, and either phenomenon may overtake you without warning. Still it is satisfactory to be able to connect the convulsion with well-defined and tangible causes.

This method of treating a striking political, international and religious event would have been charming in Buckle and delightfully instructive in Mr. Lecky; but we are apt to depreciate the grapes we gather off thorns, and from a Consul-General in active service we should naturally have expected some suggestions of a more practical kind. It is well to explain, on the scientific dialogue principle, how glaciers are formed, and to shew that, given a certain configuration of mountain surface, this and that temperature, and other meteorological conditions, your glacier will fall and crush you. But a Railway administration in a mountainous country would have to carry their investigations somewhat further, and discover, if possible, some means of protecting their traffic from the threatened danger. It is easy to say that, given a race of worthless red-skinned savages on a vast continent, and a race of white-skinned Christians on the same continent, and the latter must of necessity exterminate the former; but this takes away nothing from the cruelty of the proceeding, nor absolves the government of the white people from the moral responsibility of averting the destruction of the weaker race by every available means. And so, from an official wielding the power and influence of Mr. Seward, we should have expected something more than a mere fatalistic acquiescence in the necessity of massacres as the natural product of intercourse between foreigners and Chinese. Is it not, indeed, the special business of the Ministers and Consuls so to guide and regulate that intercourse as to prevent the violence and bloodshed which might result from the antagonism of race, and generally to mitigate the shock of opposing views and interests? If that be not the function of the diplomatic and consular representatives of foreign powers, we are at a loss to assign to them any other which would account for their presence in the country. It is right and necessary, of course, for a public man to seek to know the hidden springs of events. What we object to in Mr. Seward is his stopping there, instead of pursuing his speculations to some practical end.

And on his own ground Mr. Seward does not seem to us to be wholly invulnerable to criticism, for among the "inevitable and indisputable causes," among the "elements" which combined in a "resistless stream" to bring about the massacre he alleges a number of facts that have about as much apparent connection with it as Tenterden Steeple has with the Goodwin Sands. "The prejudices of race," "the exclusive policy of the empire," "ignorance of the people," and even "differences of religion" may all be conceived as contributing to the catastrophe; but "the Opium trade,"—that convenient stalking horse,—"the temper of foreign officials and others," "the utterances of the foreign press," and such like far-fetched causes of the massacre verge too closely on the absurd to require refutation.

Anybody could construct a theory of the massacre which would differ materially from Mr. Seward's, and yet be nearly as true. Why not refer it to the higher cost of living at the Treaty ports consequent on the proximity of foreigners; to the injury done to the junk trade by the permissive export of Pulse from Newchwang in foreign bottoms; to the favoritism shewn to foreigners in the matter of Transit passes; to the pretentious style of architecture adopted by foreigners; to the cleanliness of their habits, insulting by the contrast it constantly suggests, or to the erection of light houses, or the agitation to dredge the Woosung Bar?

* U. S. Diplomatic Correspondence, 1871. Mr. Geo. F. Seward to Mr. Fish, September, 1871.

Does Mr. Seward, we wonder, seriously believe that the massacre of Tientsin was in the remotest degree provoked by masters of steamers running down native boats on the Yangtze? He certainly says so; and in so saying furnishes a convenient test of the soundness of his general position which we would apply thus: By way of illustrating the wrong done to China through the extra-territorial privileges accorded to foreigners by the Treaties, Mr. Seward states that, "the Viceroy of Nanking, in presenting a case on behalf of some poor boat-people, whose vessels had been sunk by a foreign steamer, declared that the frequency of such accidents had so aroused the people along the river that he feared they would make reprisals *should the foreign courts continue to refuse redress.*" It would have been well had Mr. Seward specified which foreign courts he referred to, for as the only steamers likely to have got into the habit of sinking native boats on the Yangtze were steamers under Mr. Seward's country's flag, and the only court competent to "refuse redress," was probably the court over which Mr. Seward so ably presided, it must occur to every one that the most straight-forward course would have been to have compelled the steamer Captains to obey the laws of humanity, rather than allow their lawless acts to accumulate until the victims were forced to seek revenge in the distant province of Chihli on the persons of a score of French people who never sank a China boat in their lives!

Our readers will form their own opinions of the merits of Mr. Seward's contribution to an interesting chapter of contemporary history. We confess it puzzles us. A large portion of the despatch is taken up with an elaborate apology for the massacre; and from beginning to end the injustice which the Chinese suffer by the presence of foreigners is vaguely reiterated. But Mr. Seward either from accident or design has veiled the inference he wishes to be drawn from his remarks; and, but for the obvious absurdity of the idea, the practical conclusion of the essay would be that foreigners should retire from the sacred soil of Cathay. Of course, Mr. Seward did not intend this; and the allusions to "the wheels of progress and empire," and so forth in that peculiarly pompous style sometimes assumed by people when they mean nothing, which may, after all, be Mr. Seward's case. That, however, reminds us irresistibly of the rebuke which Pitt addressed to Moreton in the British House of Commons: "When the honourable member *means* nothing, I recommend him to *say* nothing."

Ldr. Mr. Ark. Mr. Burlan

No 181 One Enclosure

Legation of the United States
Peking August 24. 1872
Frederick F. Low
to
Department of State

Subject

Relations between Corea and Japan.

Encloses extract from a Japan newspaper which purports to give the reply of the Corean Government to the demand

demand made by Lahou that Corea should observe her engagement to pay Tribute.

No 181 One Enclosure

Legation of the United States
Peking August 24. 1872

Sir:-

Enclosed I have the honor to hand you an extract from a Japan newspaper which purports to give the reply of the Corean Government to the demand made by Japan some three years ago, that the former should fulfil its treaty obligations as a Tributary State.

The

Hon Hamilton Fish
Secretary of State

The letter first appeared in a native semi-official paper in Japan, from which it has been copied into most of the foreign journals both in Japan and China.

It is not unlikely that the Department will receive from the Legation in Japan information which will confirm or disprove its authenticity. If genuine, this communication furnishes confirmatory evidence of the correctness of the views expressed in previous despatches

as

as to the uncompromising attitude of Corea. Its haughty and defiant tone indicates that the Government believing itself strong enough to resist successfully all advances of foreign nations for whatever purpose.

The boastful allusion to the defeat of the French in 1866 is worthy of note;- it shows that attempts and failures to accomplish practical results only tend to make Corea more confident of her strength, and, as a consequence, less disposed to accede to any proposition looking

looking to intercourse.

The complaints because Japan did not send material aid to help Corea in resisting the encroachment of the French goes to prove that the latter expects assistance from the countries to whom she pays tribute whenever threatened with danger from "barbarian" nations, and justifies the views I took of the Kings despatch to the Peking Government, translation of which accompanied my No 102 of 23d of November last.

I

I have the honor to be
Sir,
Your Obedient Servant
Frederick F. Low

Enclosure

No 1 Extract from Japan Mail, containing a Copy of a dispatch from the King of Corea to the Japanese Government

Enclosure No 1
Despatch No 181

COREA AND JAPAN.

(Japan Weekly Mail.)

The following somewhat extraordinary article appeared in the *Japan Gazette* of July 18th. It may be mentioned that three years since there was considerable agitation in Yedo with respect to an expedition to the Corea, the object being to employ the dissatisfied Tokugawa men. Since then nothing has been heard of the matter, and it seems almost a pity that it has been raked up. However, it is of some interest, and we give it for what it is worth.

Two letters which have lately appeared in the *Nishin Shinjishi* have excited a great deal of attention both in Yedo and the provinces; and also some degree of excitement in certain quarters. They are upon the subject of the Corea; and it is the subject, *par excellence*, that after the pressing affairs of the moment, lies nearest the heart of the Japanese nation. The first writer was short enough in his own remarks, but he gave a copy of the letter sent by the Coreans in reply to one from hence, and this letter will be read everywhere as at once revealing the state of relations between Japan and Corea.

This is the letter of the correspondent of the Yedo paper:—

"As soon as our Government in Japan was established (after the revolution), an embassy was sent to Chosen (Corea), with a demand for the fulfilment of the old treaty (which made Corea tributary to Japan). Instead, however, of complying with the request of our Government, the Coreans returned an insulting letter, so repugnant to our people that we cannot endure it. This was three years ago; and probably it is now too late to speak; but I have felt very indignant with it, and can be no longer silent. Patriots ought to form their judgment upon it."

This is the reply of Chosen to the Government of Japan:—

"We have received your letter and have given it very deep consideration, comparing your despatch with other despatches. It is a long time since there has been any intercourse between our two countries. Your despatch demands payment of tribute. We will show how this affair stands. Taico Sama, without provocation or cause of any kind, invaded Corea, and made Corea sign a document agreeing to pay tribute. In those days Corea was unprepared for war, and had not even been informed of the intention of Japan. But it is very different now. The invasion by Taico, was a crime committed against Corea by Japan, which is not yet punished. Your demand is so unreasonable, that instead of Corea paying you tribute, it is for you to return the money paid by Corea. In your despatch you have made many insinuations of your having adopted foreign customs; we can assure you that Japan is Japan, Corea is Corea—but Corea has its own customs. Some years back we had a difference with a country called France, which is, among barbarians, considered to be very powerful and very large, whilst Corea is very small—but we defeated that great country! We assembled all our warriors, every one of whom was ready to die. According to our old treaty of friendship, whenever either is attacked by barbarians, the other is to help. To shew our honesty, when the barbarians went to your country, we immediately wrote to you that we had made every preparation to help you. During the French attack on Corea, we day and night expected that you would come with your forces to our aid; but not having received your assistance, we wrote and informed you of our distress, informing you of our position, and asking for immediate help. You have neither sent us aid, nor any answer to our despatch. From that day our treaty of friendship was at an end. We no longer consider each other friends, but enemies. The tone of your despatch is so friendly that we look upon it as treachery; and after having been so friendly with Japan and being repaid by treachery, we never can be friendly again. Not only have you broken the treaty as we have above described, but you have also broken another very chief point of treaty in adopting the manners and customs of the western barbarians. Our information is, that you have adopted French drill; and whenever you want money, you go to England; and if you wish to tax your own people or impose duties you take advice from Americans. But you have never consulted us, as agreed in our old treaty. You think the western barbarians are great people. We, Coreans, are a very small country, but yet, we have the courage to put in writing to you, that western barbarians are beasts. The above we intend as a direct insult to you and your allies—the barbarians. We desire that you should join them and bring your great ships and your army here. Fusankai is the nearest part of Corea to Japan. To make your attack as inexpensive as possible to you and your friends, we will send and clear Fusankai for a battle-field, and will appoint the battle. It is useless to go into any correspondence, because the wrong you have done to us is so great, that your apologies will not avail. The only alternative is a bloody war.—A war that will cost Japan all its warriors;—and then we will bring you to terms.

This is our intention. You must not attempt to write us again; and the above is a notice to you to make all preparation, for either Japan must invade Corea, or Corea will invade Japan."

(Signed) KAKURIN.

Circumstances that took place on the publication of the letter, have proved to us conclusively that it is genuine; and we are not surprised at the emotion it has caused."

ack.

Mr Jordan

No 182

RECEIVED
NOV
23
1872
DEPARTMENT OF STATE.

Legation of the United States
Peking September 2. 1872
Frederick F. Low
to
Department of State

Subject

Acknowledgment of
Department despatches numbered
85, 86, 87, 88 and 89.

No 182

Legation of the United States
Peking September 2. 1872

Sir;

I have the honor to
acknowledge the reception of
Department despatches numbered
85, 86, 87, 88 and 89.
The instructions contained
therein are duly noted.

I have the honor to be
Sir
Your Obedient servant
Frederick F. Low

Hon Hamilton Fish
Secretary of State

Examine Ch Nov 23

Mr Burlingame

Archives says the receipt of the original despatch by the State Department was advised that this steps as to the first therein were approved Ch Dec 3 Dispatch to Dec

(Let this come back with the original)

No 183 One Enclosure

DEPARTMENT RECEIVED NOV 23 1872 OF STATE.

Legation of the United States

Peking September 5 1872

Frederick F. Low

to

Department of State

Subject

Attempt at the port of Swatow to evade the Coolie emigration Act of 1862.

Enclosed copy of a despatch to the Consul approving of his proceedings in the case.

No 183 One Enclosure

Legation of the United States
Peking Sept 5 1872

Sir;-

Mr Consul Wingate of Swatow has furnished me a copy of his N° 127 to the Department in which are given the particulars of an attempt at that port to evade the provisions of the Act of 1862 concerning Coolie emigration; he also sent a minute of the proceedings instituted for the arrest and punishment of Hon Hamilton Fish the Secretary of State

the principal in the transaction.

Herewith I beg to send a copy of my reply to the Consul. His action seems to have been prompt, energetic and prudent. It has my approval, and, it will, I trust, receive the sanction of the Department.

I have the honor to be
Sir,
Your Obedient servant
Frederick F. Low

Enclosure

No 1 Mr Low to Mr Wingate
September 4. 1872

Legation of the United States

Peking September 4. 1872

Sir:-

Your despatch of 14th ultimo enclosing copy of your No 127 to the Department is received.

The whole question having been referred to the Department for its decision and instructions I content myself with remarking that it is to be regretted that an American citizen should be found so unmindful of his duties and obligations as Mr Wenmouth appears to have been

L. C. A. Wingate Esq
U.S. Consul, Swatow

here; and also, so far as the Legation is concerned, your action in his case is approved and commended.

The precedents cited pursued, — confining your action to Mr Wermouth alone — was, under the circumstances wise; although you would have had the support of the Legation and, I think, the sanction of the Department, had proceedings been instituted against the ship. The Captain of the ship was without doubt an active accomplice in the attempted fraud, and as he was the agent of the owners his

his action renders the ship liable to the pains and penalties provided for in the Act of 1862.

I may add that the Coolie Trade is a serious evil, the continuance of which is one of the greatest obstacles to the continuance of relations of amity with this Empire. In this view alone it is of the utmost importance that no reasonable efforts shall be wanting to suppress it, so far as it can be done lawfully and properly.

The policy of the United States with reference to this

detestable

detestable traffic is fixed and determined; and Consuls may rely with confidence upon the Legation for active and earnest support in all proper measures calculated to give effect to the Act of February 19. 1862.

I am, Sir
Your obedient Servant
Frederick F. Low

DEPARTMENT
RECEIVED
NOV
23
1872
OF STATE.

Ack

Dr. Burdett

No 184 One Enclosure

Legation of the United States
Peking September 7. 1872
Frederick F. Low
to
Department of State

Subject

Revision of Treaties with China.

States that the English, French and German treaties are now open to revision; encloses an editorial of the Shanghai Courier receiving a despatch upon the subject;

thanks

suggested by my French
Colleague.

Recently that despatch
has been republished in the
local pupphere. Herewith
I beg to send an editorial
in which it is reviewed at
some length.

In view of the impor=
-tance of this subject to all
nations having commercial
relations with this country the
opinions of the local pupp,
which represent with consid=
-erable accuracy the views
of the mercantile community
at the ports, may not be
without value to the Department.

At

At the present time the English, French and German treaties are, according to their terms, open to revision. The French Minister informs me that his instructions contemplate the inauguration of negotiations at an early day; it is also understood that the German Minister, who is expected here shortly, is bringing similar instructions from his Government.

This not unlikely that the moral support of the chief Treaty Powers will be sought in the negotiations. If so I shall hope to receive particular

particular instructions for my guidance.

I have the honor to be
Sir,
Your Obedient Servant
Frederick F. Low

Enclosure

No 1. Editorial in Shanghai Courier Aug 21. 1872

Shanghai Courier Aug 21, 1872

THE REVISION OF THE FRENCH TREATY

We this evening complete the extracts which we purpose making from the last volume of U. S. Diplomatic Correspondence, by publishing a despatch which is, in some respects, the most important of the series,—that containing Mr. Low's comments on the coming Revision of the French Treaty. Apart from the opportunities which this event may afford to the Treaty powers generally of improving their position in China, of correcting their errors and retrieving their mistakes, the Revision of the French Treaty derives a special significance from the fact of its synchronising with another pregnant event,—the coming of age of the Emperor. Thus the "Audience Question," which would anyhow have had to be faced, becomes an essential part of the impending negotiations between France and China; and all the powers are, therefore, equally interested with France herself in the result of her Treaty Revision.

The five points laid down by the Count Rochechouart as the basis of the proposed Revision are calmly and dispassionately discussed by Mr. Low from his own point of view, as representative of the United States. There are no dreams of omniscient patronage of a third of the human race in the despatch, which is, on the contrary, loaded with that sound practical sense which runs through most of Mr. Low's official papers; and we have here the rare advantage of seeing a broad question treated in a plain and reasonable manner.

Writing in February 1871, Mr. Low was decidedly of opinion that, as foreign powers had allowed the Audience question to lie in abeyance for ten years, it would be in the highest degree impolitic to precipitate a crisis by forcing on a settlement of it during the Emperor's minority. We must, after all, look to practical results; and it would, in Mr. Low's opinion, be a great loss to foreign interests to bring about hastily any change in the position of political parties in Pekin. As a further plea in favour of the Chinese, Mr. Low might have added that the Audience question has been elevated into a "question," less by the fault of the Chinese than by the peculiar policy of foreign powers. Somewhere between Lord Russell, as Foreign Secretary of Great Britain, on the one hand, and Lord Elgin with his special advisers, on the other, lies the responsibility of the existence of this open question in China. They concluded, for some inscrutable reason, that to carry out the Treaty of Tientsin to the letter would shake the Empire; and, therefore, they advisedly postponed the assertion of the right of audience. It would ill become them, therefore, to turn suddenly on the Chinese and demand the instant restitution of a privilege which they had voluntarily—almost ostentatiously—abandoned. But if Mr. Low is opposed to a hasty assumption of the right of audience by foreign representatives, he is no less clear that the time will come when the demand must be made and, if necessary, enforced. There is no ambiguity in his language:—

"But while arguing in favour of postponement, I am entirely opposed to abandoning or giving it up without a struggle.

When the time comes for the Emperor to assume his duties *de facto*, whether it be sooner or later, my opinion is clear and decided that it will be the duty of all foreign Governments to demand for their representatives the same rights, privileges, and courtesies that were accorded to the diplomatic representatives of China, when they visited the Courts and Capitals of Europe and America; and in case of peremptory refusal, I should not hesitate to advise the withdrawal of the Legations from Pekin, and a resort to such other measures as might be found necessary to enforce a compliance with the demand."

And Mr. Low adds the opinion, in which we entirely agree with him, that a "firm demand made at the appropriate time by all the treaty powers, will not meet with a refusal." We shall soon see. The "appropriate time" referred to by Mr. Low will be in October next, beyond which time there seems no pretext for the further postponement of this matter of audience, unless it be postponed for good and aye.

M. de Rochechouart's second point,—the right to place salaried Consuls at any point which France may select,—is very ably combatted by Mr. Low. England he says, in effect, might with propriety demand such a privilege, but until France has filled the existing commercial ports with paid consuls, how can she consistently press for further trading ports? Mr. Low correctly surmises that it is not, in fact, the right to foster or protect trade which the French representative had in view, but the right to protect missionaries; and this Mr. Low seems to think an unmixed evil. On this point we differ entirely from Mr. Low; and he appears to us to be somewhat unreasonably jealous of the success of the Catholic missionaries. But the point raised by M. Rochechouart is really the whole question of residence in the interior,—a question on which opinion varies so widely that, before any new Treaty engagement is made, the subject will require to be more thoroughly studied than it has been yet. Residence in the interior can only be justly demanded of the Chinese on certain well-defined conditions. When the Treaties were made it was not known what these conditions should be, but the case is now different; and it ought to be quite possible to frame regulations which would enable foreigners to reside in the interior without risk to Chinese institutions or danger to themselves.

The third point,—that of opening the navigable rivers to steam—has the warm approval of Mr. Low; and this concession is one which has so universally commended itself to all parties that, if nothing else comes out of the Treaty revision, the unanimous wish of foreign powers ought to ensure that this privilege be granted.

M. de Rochechouart requires a mixed code by which commercial and civil, and even criminal cases between French and Chinese may be judged; and Mr. Low deprecates the idea, taking as a warning the strange caricature of jurisprudence which daily exhibits itself in the Maloo. The American Minister so far from, like Mr. Burlingame, claiming for the Chinese a higher civilization than for his own countrymen; or, like Mr. Seward, glossing over the glaring abuses which are inseparable from

the whole Chinese judicial system, plainly avows the utter incompatibility between the barbarous practices sanctioned by law and custom in China with the legal procedure of civilized countries.

On the "Tonnage Dues" question, which is Count Rochechouart's fifth point, Mr. Low is, in our opinion, decidedly unsound. The French Minister's proposal to place the administration under a Mixed commission is not at all answered by Mr. Low's remark that, for anything he knows to the contrary, the Inspector-General of Customs may be administering the fund very well. The tendency of the foreign representatives to throw unlimited power into the hands of one man, no matter who the man may be, is strangely repugnant to the spirit of the age. The despatch of Mr. Hamilton Fish to Mr. Low, which was written a month after Mr. Low's, and is published in the same volume, will have shown Mr. Low that his Government are by no means so satisfied as he is of the unexceptionable management of the Tonnage Dues fund; and it is fair to infer that Mr. Low has since then modified his views, so as to favour somewhat more the reasonable proposition of M. de Rochechouart.

Encl

accln

Mr Bridges

No 185 Two Enclosures

DEPARTMENT
RECEIVED
NOV
23
1872
OF STATE.

Legation of the United States
Peking September 10 1872

Frederick F. Low

to

Department of State

Subject

Mineral and other
resources of China.

Encloses two letters from
Baron Von Richthofen giving the
result of his observations in
the northern & Western provinces.

No 185 Two Enclosures

Legation of the United States
Peking September 10. 1872

Sir:-

I have the honor to send herewith two "letters" (the last of a series) from Baron F. Von Richthofen, giving a summary of his observations, geographical, topographical, mineralogical and economical, during an extended tour in the north and west of China.

The scientific attainments of

Hon Hamilton Fish
Secretary of State

of the author and his high character give peculiar value to these reports. I cannot too strongly commend them to the careful examination of the Department, and to all others who desire to obtain authentic information with reference to this almost unknown country and its wonderful natural resources.

Baron Richthofen has been travelling in the central and northern provinces the larger portion of the time during the last three years, under the immediate patronage

of

of the Shanghai Chamber of Commerce. This accounts for his reports being more of an economical than a strictly scientific character. He has now terminated his engagement with the Chamber and has taken his departure for Europe. It is not unlikely the results of his observations will soon be given to the world in a more extended and accurate form than the "letters" which were of necessity hastily written.

I have the honor to be, Sir,
Your obedient servant
Frederick F. Low

P.S.

P.S.

Enclosed in the package for the Department is a copy for Professor Henry of the Smithsonian Institute. It will, I presume, be acceptable to that institution of science and knowledge.

Enclosures

No 1 Letter of Baron Von Richthofen on the Rebellion in Kansuu and Shensi.

No 2 Letter of Baron Von Richthofen on the Provinces of Chihli, Shansi, Shensi, Sz'-Chwan, with notes on Mongolia, Kansuu, Yunnan and Kweichau.

No. VI.

LETTER

BY

BARON VON RICHTHOFEN,

FROM SI-NGAN-FU,

ON THE

REBELLION IN KANSU AND SHENSI.

SHANGHAI:
PRINTED AT THE OFFICE OF THE "NORTH-CHINA HERALD."

1872.

LETTER FROM BARON VON RICHTHOFEN.

SI-NGAN-FU, PROVINCE OF SHENSI, Jan. 12th, 1872.

WALTER PEARSON, ESQ.,

Secretary of Committee of General Chamber of Commerce, Shanghai.

DEAR SIR,

I reached this place a week ago. I find that the Catholic Missionaries are in regular communication with Hankow, and make use of their kind services in forwarding you this note. It is mainly intended for keeping you posted in regard to my whereabouts, as I have not the leisure at present for detailed communications.

I left *Peking* on October 25th, and made immediately for the high hills which border the plain to the west. After visiting some of the coal districts from which the capital is supplied, I went by an exceedingly mountainous but very interesting route to *Pau-ngan-chau*, and proceeded to *Siuen-hwa-fu* and *Kalgan*. I spent a fortnight beyond the Great Wall, making a delightful trip through southern Mongolia, in the execution of which I was much assisted by the hospitality and civility of the gentlemen of the Belgian Catholic Mission; one of them gave me the pleasure of his company on the whole way, and went with me as far as *Ta-tung-fu* in northern Shansi. Another fortnight was devoted to the journey from *Ta-tung-fu* to *Tai-yuen-fu*, when I visited the *Wu-tai-shan*, one of the sacred mountains of China, with summits of ten thousand feet altitude. This was in the first days of December, and the weather intensely cold.

It was my intention to go from Tai-yuen-fu westward into Shensi, and to explore the totally unknown northern portion of that province. But I was obliged to give up that plan, those districts being devastated and much depopulated by the Mahomedan rebels, some of whom are said to be still in the hills, and to make travelling unsafe. I found it quite impossible to hire men or animals for that trip, and had therefore to follow the great high-road which leads by way of *Ping-yang-fu* and the *Tung-kwan* gate to *Si-ngan-fu*.

I am struck with the greatness and importance, politically as well as commercially, of this city, which, after the partial destruction of Nanking, Wu-chang and Hangchau, is probably the second in size in the Empire. Its magnificent walls have completely protected it from destruction by the rebels. I hope to give you some data of interest in regard to it, on my return.

To my great regret, I must leave the exploration of the province of Kansu to some future traveller. That country is in a very unsatisfactory condition, the Mahomedan rebels holding a portion of it, and making travelling in the rest of it troublesome and unsafe. The villages are deserted and destroyed; the two high-roads to Lan-chau-fu filled with soldiers, of whose propensity for stealing I have had personal experience, besides having been warned of them by their own officers. There is still a good deal of travelling done between Si-ngan-fu and Lan-chau-fu, chiefly by merchants. They go in large bodies, choosing little known byeways through the hills, and are still subjected to much danger and annoyance, besides using a great deal of time. The hardships of such a trip, and the length of time which it would require, would hardly be commensurate with the result that I could expect to arrive at under the present circumstances. I would, moreover, not be able to go beyond Lan-chau-fu; and as no road exists between Kansu and Szechuen, I would have to return to Shensi in order to go south.

In regard to the province of Kansu, I must therefore confine myself to collecting data from other persons, and will proceed from here directly to Szechuen.

The weather is very favourable for travelling in the present season. It was cold while I was in Mongolia and Shansi; but the temperature is pleasant in this portion of Shensi. Snow fell only three times since I left Peking, but never more than one or two inches. The whole journey was made on horseback, with Mongolian ponies.

As some notes respecting the Mahomedan rebellion may be of immediate interest in Shanghai, I will communicate to you already now what I could learn in regard to it. The information is collected from many and varied sources.

The year 1861 is stated as the time when the rebellion commenced. It is emphatically and positively asserted, by persons who are in the position to be well informed, that the first move was made in this province of Shensi, and that the province of Kansu and the distant regions of Turkestan and Ili followed afterwards, one by one, the Mahomedans there being encouraged by the example set by their co-religionists in Shensi. It is for this reason, that they had such easy work in the far west, in killing the Chinese and making themselves independent.

Not much of a definite character can be ascertained in regard to the immediate causes of the rebellion. Those of a more remote character date far back in history. Since the time when, under the Tang dynasty, the Mahomedan *Uïgur* (pronounced *Hwei* or *Hwei-hwei* by the Chinese) were called from their pasture grounds situated beyond the Great Wall, west of

Ning-hia-fu, to aid the Chinese against the invasion of the Tibetans from Kokonōr, these people took a firm footing on the territory of China proper, and spread gradually over the north-western provinces. Although those of Shensi and Kansu wear the queue and speak Chinese, they are considered by the pagans as a different people; and this view is corroborated by their features, which differ from those of the Chinese proper. The pagans generally use here, for themselves the well known term "Han-jin," to mark their distinction from the Mahomedans. These, including the numerous converts of purely-Chinese origin, are called *Hwei-hwei*, and since they are in rebellion, *Hwei-fei*. The contempt in which the Mahomedans hold the pork-eating Han-jin, and the aversion which these have against people living among them and having manners and customs so different from their own as even to preclude intermarriage, has created since ancient times much ill-feeling between the adherents of the two religions, and it has much increased within the last decades. The Mahomedans, who, in general, prospered well, and are a more vigorous and energetic race than the Han-jin, grew proud and overbearing, while these had an advantage by their greatly superior numbers. Acts of violence became more and more frequent. The mutual ill-feeling increased when, in 1860, the Taiping rebels made a first, though very short, invasion in the province of Shensi. The pagan inhabitants repulsed it, and accuse the Mahomedans of not having assisted them, but of rather having embraced the cause of the invaders. The Mahomedans, in their turn, accuse the pagans, that they propagated inflammatory addresses throughout the province, inciting the population to the annihilation of all Mahomedans. Matters had indeed come to such a pitch, that the only remaining question was this, which of the two parties would commence hostilities. The initiative rested with those who were most energetic, that is, the Mahomedans. The first move of that rebellion, which afterwards spread through the whole of Central Asia and became so disastrous for the Chinese Empire, appears to have been, the rising of the Mahomedans residing in the city of *Hwa-chau*, situated on the high-road, 180 *li* east of Si-ngan-fu, now totally destroyed. Thence the rebellion spread from place to place, and gradually over the whole province of Shensi. It never had any head or leader, and the only tie uniting the different bands of rebels was the vague intention to exterminate all the pagans in the province, and to make themselves sole possessors of it. The life and property of the Christians, of whom there are now about 20,000 in the province, were spared. But the pagans were cut down wherever met with; men, women and children alike. Those who lived in the neighbourhood of hills took refuge in them and, in many instances, spent years in retirement; but in the plains, where no place of refuge offered, the massacre was terrible. The ease with which the Mahomedans, though much inferior in number, overpowered their timorous game, is remarkable. Eye-witnesses say that whole villages were deserted on the approach of a few rebels. The ravages committed by these from 1861 to 1870 are fearful, nearly every village and town being completely destroyed. They were roving about the country in large bands; nearly every year they remained for some time on the high-road between the Tungkwan gate and Si-ngan-fu, rendering all intercourse impossible. Happily, they had no guns. This circumstance saved some of the larger walled cities, among them Si-ngan-fu. The Mahomedans of this place, estimated at fifty thousand, were from the beginning forbidden to leave the city, under penalty of death, and this restriction is severely enforced upon them until this day. Their overbearing manners of former time are said to have given way to great humility. The pagan population of the city, estimated at about one million, is very desirous of killing them all, and only prevented from doing so by the mandarins.

The first General sent by the Chinese Government against the rebels was To-ta-jin, said to have been an energetic but cruel soldier. But all the success which he had with the few troops at his command was, to repel the rebels, from 1861 to 1866, gradually from the eastern frontier of the province of Shensi to beyond Si-ngan-fu. This was accomplished with great loss of men among his own troops. All the Mahomedans whom To got hold of, women and children included, were killed. The rivers are said to have been coloured red with blood, at that time. It appears that the Chinese Government did not take the matter seriously in hand, as long as there were Taiping and Nien-fei rebels to fight against; but, after having sent an insufficient army into Shensi, contented itself with protecting the passages across the Hwang-ho, leading into Shansi.

In 1866, To was killed in battle, and Tso-kung-pau was appointed in his place Governor-General of Kansu and Shensi, and Commander-in-chief of the troops stationed in the two provinces, with the express order to reside in Kansu. The career of this General in former years is well known. He distinguished himself in fighting the Tai-ping and Nienfei. But his career in the war against the Hwei-fei is marked by an almost complete want of success. The rebels immediately regained possession of the districts which it had cost his predecessor so much time to take, and at no time before had the devastations made by the rebels in Kansu and Shensi been so great as they were in the years following the accession of Tso-kung-pau. On the whole road from Tung-kwan to this place, the years from 1867 to the spring of 1870 were described to me as those in which the suffering was greatest. Si-ngan-fu was then completely surrounded with rebels during two years, and many people in the city died from starvation. Battles were lost, regiments decimated, and no success gained.

It was in this emergency that, as you will recollect, Li-hung-chang got the order, in the spring of 1870, to fight the rebels in Shensi and Kansu. He marched from Wu-chang-fu up the Han river, and entered Shensi with his forty battalions, of the nominal strength of five hundred men each (as is every other battalion which I shall have to mention.) All of these were provided with foreign arms, some of them drilled by foreign officers, and practised in warfare. But scarcely had General Li reached his place of destination, when he was called to the province of Chili, after the massacre of Tientsin. He left his troops in Shensi, and gave the command of them to General Liu, who has held it since then. The fame of Li-hung-chang (or, perhaps, of his foreign arms) is so great, that the rebels withdrew immediately on the

approach of his troops, never engaging in a fight with them. No one of the soldiers of that army whom I met has ever seen a rebel. The whole province of Shensi was at once cleared of organized rebels, without bloodshed, none but stragglers remaining. The main body retired into Kansu, where they were received by their coreligionists, although these are said not to be in complete harmony with the Mahomedans of Shensi.

Since the spring of 1870, peace may therefore be said to be comparatively restored in Shensi, though a state of complete safety is not quite re-established, chiefly in the hilly districts of Yen-ngan-fu and Yü-lin-fu. The remnants of the population have left their hiding places in the hills and returned to their villages, many of which have been rapidly rebuilt. The province will remain in a peaceful condition as long as it is occupied by foreign armed troops.

Proceeding now to the province of Kansu, which is the present theatre of war, I must first state the astonishing fact that General Liu did not follow up his enormous advantage, but contented himself, during the last eighteen months, with guarding the frontier of Shensi towards the Kansu side. He left all the fighting in Kansu to Tso-kung-pau, with whom he was evidently not on terms of harmony; and though second in military rank to him, he never assisted him in the severe struggles which the army of Tso had to undergo, sometimes in his close vicinity. Tso-kung-pau is said to have the immediate command of about two hundred battalions, or about one hundred thousand men, nominally (not counting Liu's troops), which are nearly all in Kansu. It appears that Tso-kung-pau, although no go-ahead-man, and lacking energy, is a cautious and prudent general, and that his want of success is due to the fact that his troops are much inferior in fighting capacity to those of Li-hung-chang, and were originally badly armed. In the course of time they have received a great many foreign arms; but most of these are said to have been taken by the rebels, Tso's troops not being accustomed to their use. A new supply was sent a short time ago to Kansu, but the rebels caught the whole train, killed the escort and took possession of the arms and ammunition.

Although Tso-kung-pau was defeated in many battles (so called) and his ranks are much thinned, he has had one signal success. The Mahomedans had, from of old, two strongholds in Kansu. The first of these was *Kin-ki-pu*, situated on the right bank of the Yellow River, about 100 *li* due south of Ning-hia-fu, and at the same distance from the Great Wall. This place is said to have been occupied by the Mahomedans for more than a thousand years. After they had gained there a firm footing, they settled in the much stronger place *Ho-chau*, about 200 *li* southwest of Lan-chau-fu, the capital of the province. It is situated amidst high and rugged mountains, and can only be approached by narrow footpaths leading through rocky defiles. Ho-chau is known, even in Europe, as the place which has been, since centuries, the hotbed of all Mahomedan anti-Chinese machinations. Now, Kin-ki-pu was taken, about April 1871, by the Imperial troops under Tso-kung-pau, and the rebels repulsed beyond the Yellow River. Since then, Kansu is cleared of organized rebel troops east of the Hwang-ho, with the exception of the city of Ho-chau and its environs. On the left bank of the Hwang-ho, the Imperialists hold the two cities of Lan-chau-fu and Ning-hia-fu, but no territory beyond them. All efforts should now be concentrated towards the capture of Ho-chau, which is the key to the suppression of the rebellion. It appears that, if that city were taken, the Imperialists would easily regain possession of that narrow but most important strip of land, which stretches north-westward from Kansu, between the mountains of Kokonor to the south and the Great Wall to the north, and which embraces the three cities of Liang-tshau, Kan-shan and Su-chau.

This too is, as I learn, the present plan of operations. Tso-kung-pau has his head-quarters in Ngan-ting-hien, about 200 *li* southeast of Lan-chau-fu, and intends to operate against Ho-chau. But, to judge by the slowness of his movements, he is fully aware of the difficulty of his task, as he has to fight the combined Mahomedan forces of Shensi and Kansu. It is not known, here, whether these have now any chief. They are, however, much feared by the Imperial troops, and are said to have excellent horses, to be good horsemen and good marksmen, very valorous and ready to fight, never afraid of death. They burn all prisoners of war, while the Chinese shoot those they get into their hands.

The precedents of the army of Kansu would not warrant any sanguine expectations regarding the early capture of Ho-chau and the termination of the war. But, fortunately, there has been a change in the command of Li-hung-chang's army. When I reached Hwa-chau, on my way from Tung-kwan to Si-ngan-fu, I met General Liu, who returned with a portion (18 battalions) of his troops, bound for Chou-kia-kou in Chihli (situated on the Wei river, not far from Wei-hwei-fu), whence he is to march to Tientsin in the third Chinese month. He has been replaced in command by Tsau-chu-men of Tientsin, who, coming from the east, arrived in Hwa-chau on the same day, and received from Liu the official seal as commander of all those of Li-hung-chang's troops which remain in Shensi (22 battalions, as I learn). Tsau is now in Si-ngan-fu, and will start for the seat of war after Chinese new year. Although he is inferior in rank to Tso-kung-pau, I could not learn whether he is also second in command to him, and is to assist that general in his operations. It appears, rather, that he will act independently, Li not being desirous of putting his pet troops under the command of an officer co-ordinate in rank with himself. Notwithstanding this apparent unfortunate conflict, some more action than heretofore may be expected, because foreign armed and drilled troops will actually march into Kansu. The military and civil mandarins with the army of Tsau are already preparing here for the journey to Su-chau.

Su-chau, as a glance on the map will show you, is the furthest place in China proper, and only 100 *li* distant from the *Kia-yu-kwan*, the last gate in the wall, which terminates there. This gate, which, before the rebellion, was kept locked, and was expressly opened for every traveller, is actually the door of the Chinese Empire in that direction. The Chinese will endeavour to re-extend their dominion at least to this point. And I am confident that they will succeed before long, because the Mahomedans are diminishing in number and cannot get any assistance, while the Imperialists can increase their forces. An increase in numbers alone

would probably be of little avail to them; but they strengthen the efficiency of their army by adding foreign-armed troops, which have already done the miracle of clearing Shensi without one gunshot. If the Imperialists should succeed, and peace be re-established in these two provinces, after they have been allowed, by gross negligence, to suffer immensely during an entire decade, they will owe it mainly to foreign arms and foreign drill. I have visited an arsenal in this city, where a considerable quantity of ammunition for foreign arms is made, by men from Ningpo who have had their course of instruction in the arsenals of Shanghai and Nanking. The lead even of which they cast their bullets has English brands. There is also a French officer, General Pinel, with the Imperial army, who has much distinguished himself, and earned the first red button. He came to Shensi with Li, one of whose battalions he commanded. I met him at Hwa-chau, on his way back to Tientsin. But Tsau-chu-men brought him the Imperial order to return with him to Kansu, where he will command six battalions. He is now the only foreigner in the army, in these provinces.

Besides these elements of strength, the exuberant harvest which has been obtained this year in Shensi allows the Imperial army to be well provided with food. Money, too, appears to be plentiful. The Mahomedans, on the contrary, can be cut off from their chief sources of supply, and may finally be obliged to surrender to an overwhelming army. Their lot in this case would be, to be killed to the last man.

Since my entry in Shensi, I have been constantly among soldiers and officers. Among the latter there are men of a military turn of mind, who in time of war will do honour to their position. Nor are the soldiers, who are mostly from Honan and Hunan, made of bad stuff. They have mostly a stout frame, and can stand fatigues remarkably well. But they are not animated by either a military or a patriotic spirit, and the only means to keep up a slight discipline among them is, the fearful power of capital punishment which every commander of at least one battalion wields over his own men. It is made use of liberally, and many are the soldiers' heads which are cut off by the executioner. Can there be any more forcible illustration of the complete lack of military spirit than this, that the executioner is one of the comrades of the criminal, and yet receives five hundred *cash* for cutting off his head!

January 14th.

I am about to leave this place, and hasten to finish this letter. To complete my narrative of the operations of the Chinese army, I must add, that Tsau-chu-men is to march with his twenty-two battalions of Li's troops directly through the whole length of Kansu to Su-chau, a distance, from here, of 3,200 *li*, nearly one half of which is through territory occupied by the rebels. Although he is to act independently from Tso-kung-pau, his movements will assist the intended operations of this general. It is confidently expected, that the rebels will not dare to oppose the march of Tsau, and will avoid any collision with his troops. They have no cannon. The chief weapon they use is said to be a sort of gingall fastened on the saddle. They have no infantry, but fight only on horseback, and owe their successes to quick and unexpected attacks. In the level country which predominates on the road from Lan-chau-fu to Suchau, cavalry would be no match to well armed infantry, provided that the military drill is equal on both sides. But it is probable that the Mahomedan horsemen know still less of drill in rank and file than even Chinese infantry.

I do not know for how long time Tsau is to occupy the western end of Kansu; perhaps he will wait there until Ho-chau is taken by Tso-kung-pau, cutting off the Mahomedans from any retreat to the west. But I understand from his own officers, that his real place of destination is Ili, where some of the cities that were formerly under Chinese dominion are now occupied by Russian troops, who prevent in that province any declaration of independence on the part of the Mahomedans. Those same officers say (I give the information for what it may be worth), that the Russian Government has requested the Chinese authorities at Peking to retake possession of those cities, declaring that the Russian troops will withdraw on the arrival of the Chinese. Tsau is waiting for a reinforcement of thirty battalions before undertaking the march beyond the Kia-yu-kwan gate, through the Shamo desert, to Hami and the region beyond.

We may therefore be prepared to hear before long of the restoration of Chinese rule, not only in the province of Kansu, but also in the regions beyond extending to the Russian frontier. If these successes should be achieved, the Chinese owe them to a great extent to foreign arms and, in the West, to Russian assistance. Whether they will attempt after that to re-establish their dominion in the direction of Yarkand and Kashgar, remains to be seen. All these tasks appear, on account of deserts and distances, far greater than they are in reality. An enemy who withdraws immediately on the approach of a few well armed Chinese battalions is certainly a contemptible enemy, even though the Chinese be overawed by his supposed valour and energy. The Chinese have overpowered the nations of Central Asia before they were able to bring into the field foreign arms andcannon, and they should certainly have easier work now, when the mere rumour of their weapons can clear an entire province of rebels.

I have been invited to travel to Kansu with the army of Tsau, whose officers and soldiers have invariably treated me very civilly. This would be a fine chance for an adventurous traveller. But it will probably be a march of several months, and by joining it, I will lose all the good season for Szechuen and Yunnan, where I find just as unexplored a region, and perhaps also just as much, or as little, fighting.

I have collected on my journey much material which, I trust, will be of interest to the Chamber of Commerce. But I shall not be able to work it up before my return to Shanghai. In a few weeks I hope to notify you of my arrival at Ching-tu-fu.

I am, dear Sir,

Yours respectfully,

F. VON RICHTHOFEN.

No. VII.

LETTER

BY

BARON RICHTHOFEN

ON THE

PROVINCES

OF

CHILI, SHANSI, SHENSI, SZ'-CHWAN,

WITH NOTES ON

MONGOLIA, KANSU, YÜNNAN AND KWEI-CHAU.

SHANGHAI:
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No. VII.

TO THE COMMITTEE OF THE SHANGHAI GENERAL CHAMBER OF COMMERCE.

SHANGHAI, *May* 1872.

GENTLEMEN,

I have the honour to notify you of my return from a journey through the northern and western provinces of China, and to submit to you those results of it which may be of interest by their more or less direct bearings upon practical questions. As on former occasions of a similar nature, I must ask your indulgence for the fragmentary character of these communications, which were written on the journey itself, and without an opportunity of comparing my observations with those made by others who had travelled previously over portions of the same ground.

I left Shanghai on September 27th 1871, and embarked for Peking. It was a long journey at that time, as the country was inundated, and the current in the Pei-ho run still with great force. Much time was lost at the capital in the attempt to make travelling arrangements for the entire journey as contemplated. I adopted finally the plan of making contracts with muleteers and carters from one great city to the next, and this proved afterwards to be, in many respects, the best method of proceeding, as it tends to procure for every portion of the road such men as are well acquainted with the country. For myself, my interpreter Paul Splingaert, who assisted me with his excellent services also during this last journey, and my Chinese servant, I purchased Mongolian ponies. With these I performed a journey of five months, to Sü-chau-fu on the Yangtse, whence I descended the river by boat.

I started from Peking on October 25th, bound for Tai-yuen-fu, by way of Kalgan. I did not take the usual road to the latter place, which leads through the Nankou-pass, but went to the hills west of the capital, and found an extremely mountainous but highly interesting mule trail, across hills and narrow gorges, to Pau-ngan-chau, whence I took the road to Siuen-hwa-fu and Kalgan. After spending a fortnight on a trip through the southern portion of Mongolia, I reached Ta-tung-fu. Thence I travelled through the whole province of Shansi from north to south, leaving it at the fortress of Tung-kwan, on the great bend of the Yellow River. From that place I followed the high road to Si-ngan-fu.

In Shansi and Shensi I seldom left the high road, because any great deviation from it, to the northernmost portion of Shensi or to Kansu, is at present attended with much delay, on account of dangers which must be avoided; also because the additional results, which I should have been able to get, did not appear to be commensurate with the time and trouble required for arriving at them. I succeeded, however, in gathering some information regarding those countries.

After a sojourn of twelve days at Si-ngan-fu, I made for Sz'-chwan, by the only connecting road in existence. It leaves northern Shensi at Pao-ki-hien on the Wei-river, crosses the range of the Tsing-ling-shan, passes a few miles from Han-chung-fu, and, through the cities of Ning-kiang-chau, Kwang-yuen-hien, Kien-chau, Mien-chau, leads on to Ching-tu-fu.

Although my journey by land, as originally comtemplated, ended at Ching-tu-fu, I could not resist the temptation of trying to add to it a trip through the southwesternmost portions of China, and to explore the mountains of western Sz-'chwan, as well as the provinces of Yünnan and Kwei-chau. Besides hoping to contribute to the general knowledge of the geography, geology and resources of those unknown regions, I wished to examine the metalliferous deposits that are widely spread through them, and to gather some information respecting the many independent tribes inhabiting south-western China, and their languages. My final object, however, was, to explore the road from Ta-li-fu to Burma. I had some difficulty in collecting the necessary information, but finally settled upon the plan, to travel by way of Ning-yuen-fu to Ta-li-fu, a journey of about 45 days, and thence to go to Tang-yuë-chau, the last place reached by Major Sladen on his way from Bamo to Yünnan. From that city I intended to go again eastward, by Yünnan-fu and Kwei-yang-fu, the capitals of the provinces of Yünnan and Kwei-chau, to Chung-king-fu on the Yang-tse. By executing this comprehensive and effective plan, I could hope to realize all I had projected. I have no doubt that I would have succeeded, if I had not met with an accident of a peculiar kind. As it prevented me from executing what might perhaps have been the most interesting portion of my journey, I beg leave to state some particulars.

I started on the proposed journey from Ching-tu-fu on March 11th, and proceeded energetically. Everything went on very satisfactorily till the 19th of March, when, about half way on the road to Ning-yuen-fu, having nearly reached the summit of the high Siang-ling pass, between the cities of Yung-king-hien and Tsing-ki-hien, a completely unprovoked and murderous attack was made upon my interpreter and packtrain, in which the former came near being killed. I had walked slightly ahead, and was an unseen spectator of the scene, from a house situated higher up the hill. The place was at 8,000 feet altitude, on a narrow path leading along a precipitous and snowcovered hill side. The attacking party consisted of 47 men, mostly coolies, who came from the opposite direction, and carried a coffin with the remains of the wife of a general high in command in the department of Ning-yuen-fu, the rest being an escort of soldiers from Hunan, and an officer in command of them, from the same country. The headmen of the coolies, who instigated the attack, did it evidently with the purpose of squeezing money, relying on their superior numbers. But the general excitement which immediately ensued made the attack murderous. My interpreter, after knocking the first men down, had to run for his life from the overwhelming force, closely pursued by them, and narrowly escaped the poles and iron clubs swung upon him. He had the presence of mind to draw his revolver but not to fire it. My sudden appearance, in hurrying down the steep slope, with the same weapon in my hand, put an end to the attack.

We waited now for our men and animals, and, as they did not come, were obliged to walk back to them. We found them turned back by the gang, and possession taken by them of horses, guns and baggage. A ransom, first of ten, and then of four hundred, taels was asked for the restitution of my property, on the invented pretext, that my men had broken off a piece of the coffin, which, by the way, had been quite a distance away from the scene of action. Our attempts to bring the men peaceably to their senses, and to have our property restituted, were in vain, partly because they were a large force (their number having been swelled by passing coolies) and hoped to get their squeeze, but chiefly because they were kept in excitement by the officer, who got them up to such a pitch as to make a repetition of the attack imminent. It would not have been difficult to settle the matter with the actual use of our arms. But the killing of men who were not professional highway robbers would have put an immediate and disastrous stop to my journey. The only alternative by which I could hope to continue it was, to leave the property in the hands of the men, and to deliver them up to the Yamen of Yung-king-hien, two days back on my road. The satisfaction which lay in the fact, that we two isolated foreigners were, although not without danger, escorting a gang of nearly fifty prisoners, who could by no possibility escape in that country, through crowds of their own people, was a poor consolation for the depressive feeling of having to descend the high pass which it had cost so much labour to climb. On the second day we hurried on to Yung-king-hien, feeling sure of our prisoners, who made slow headway with their bulky load, but could not possibly abandon it and had necessarily to go to the same place. On our arrival in the city, the Yamen, which has no soldiers at its command, was much afraid, that, not being able to imprison the whole crowd, the men would create a riot against us, in which it would have no power to protect us, the more so as it was market day and the city crowded with people from the country. Happily we were much ahead in arriving, and succeeded in turning public opinion in our favour. The mandarin of the place, a native of Ningpo, of the rank of a Tautai, did what was in his power. The coolies were left free at my request, but their headmen punished much more severely than I desired. This was for the attack. The insult in having me turned back, the appropriating my property, and the expense and loss of time were to be charged to the Hunan officer. But he escaped free. He could not be punished by the civil mandarin, and the latter was afraid to keep him in custody longer than he could help it, because he would provoke the rage and vengeance of all the Hunan officers in the vicinity.

It was precisely the same consideration which induced me finally to give up the plan of my journey. The road to Ning-yuen-fu had been described to me as very dangerous, since a portion of it leads through the territory of the independent tribe of the Lolo, who attack frequently, in great numbers, small travelling parties going with baggage. That danger had not deterred me, because arms can be freely used against Lolo. But here was a danger of another kind. For at least thirty days more, I was to travel through a region in which a great many soldiers are stationed, not of the regular army, but so called "yung-ping" or hired soldiers, commanded by officers who belong to the regular army and are nearly all from Hunan. These men are strongly animated by a clanish spirit, which is increased by the peculiar circumstances under which they live. The rumour of our affair would, of course, spread along the whole line of the road, and arrive at the various military stations in a distorted and perverted condition. General Li himself, who is stationed on the road, would hear the invented story of the violation of the coffin of his deceased wife. The coolies, of which there are considerable numbers on the road, would hear that some of their fellows had been flogged on my behalf. The Yamen foresaw these dangers immediately, and offered to send an explanatory letter ahead of me. But when I requested to have a copy of it given to me, for using it as a circular letter in my own hand, they gave me, after much hesitation, a completely unsatisfactory piece of writing, declaring openly, that they could not state the truth in it, as that would cost the head of the Hunan officer, and

provoke the vengeance of his numerous comrades. I had therefore before me almost the certainty of a repetition of the first adventure, not one time, but several times, and under circumstances which would make the use of arms unavoidable. It was not the accident itself, but these threatening consequences, and chiefly the prospective necessity of using arms, which turned me back.

I must add, that my proposed road followed for hundreds of miles a narrow strip of land inhabited by Chinese, which is accompanied on either side by high mountain ranges, in which dwell independent tribes. An escape from the road in any other direction is therefore impossible.

It is worthy of notice, that the adventure which turned Mr. T. T. Cooper back, a few years ago, happened at his entrance, farther west, into the region where the military stations commence. As both accidents are of a nature unexampled in other portions of China, and officers of the regular army were concerned both times, it appears that the passages to the west will be shut up to foreigners, unless something be done to check the lawless behaviour of the officers who are stationed there.

In no other portion of China is a plan of travel, once given up, so completely frustrated as in western Sz'-chwan. The country is blocked up, as it were, by a barrier of high mountains inhabited by independent and hostile tribes. I had chosen the northern road across them. Turned back from it, I had the only chance left of crossing the barrier at Hwui-li-chau, four and one half degrees of latitude farther south. No other road leads from east to west for that whole distance. I went accordingly, by way of Ya-chau-fu and Kia-ting-fu, to Sü-chau-fu on the Yangtse, which is properly the key to Yünnan. The journey to this province and Kweichau is perfectly easy and safe. But the season was too much advanced to execute, from Sü-chau-fu, my great original plan; and any other plan, such as a visit to the capitals of both provinces, appeared so paltry and so little promising of important results, as compared with the plan I had given up, that I determined to leave the examination of the whole southwest to some future traveller. Thus it happened, that I executed nothing more than the plan of travel which I had the honor to lay before you, before I left Shanghai. I collected some information in regard to the south-western regions, and then proceeded down the Yangtse, making only occasional excursions off the river. I left Sü-chau-fu on April 10th, arrived at Chung-king-fu on the 16th, at I-chang-fu on May 2nd, at Hankow on May 17th, at Shanghai on May 21st.

With very few exceptions, my experience with the natives was pleasant throughout my journey. And as regards the mandarins, I am bound to speak in the highest terms of their endeavours to assist and protect me whenever it was desired by me.

On account of the diversity in character of the regions traversed, I will again treat on the different regions in the order in which I passed through them, and interrupt my account occasionally by a chapter on such topics as concern larger extents of country.

CHILI, MONGOLIA, AND SHANSI.

1.—*FROM PEKING TO THE COAL-MINES OF CHAI-TANG.*

A few miles west of Peking rises a group of gentle hills. From their outliers, on which Yuen-ming-yuen is situated, they ascend gradually to an altitude of about two thousand feet above the plain. They are well known to every visitor of the capital, on account of the numerous temples built in their recesses, in which the foreign residents of Peking take refuge during the heat of the summer. These hills are joined to the west by high and rugged mountains. South of the river Hun-ho no such intermediate link exists: the steep descents of the high ranges bound there abruptly the wide plain; while north and northeast of the capital, the level country extends into some deep bights between mountainous promontories.

There are few regions in China the detailed exploration of which would so well repay the labours of the geologist as these mountains, the abutments of which afford a grand panorama as seen from the walls of Peking. Deeply evaded rivercourses expose their interior structure with remarkable clearness, and the opportunity is rare in any country of studying cross sections of stratified formations equalling in grandeur those which can be traced here with perfect ease. The interest they afford is increased by the occurrence, under very peculiar circumstances, of numerous coalbeds, which yield several varieties of coal, and, in some localities, may be of prospective value.

I proposed to visit the most known of these localities, namely, the valley of Chai-tang, situated about fifty miles* (by road) west of Peking, amidst rugged mountains. The usual direct

* The "mile" adopted in the following pages is the English statute mile (69.16 to one degree of the equator), unless otherwise stated. Of Chinese *li*, which shall be occasionally made use of as a measure of distances, 200 are equal to one degree; exceptions shall be especially mentioned.

road to it having been examined by Mr. Pumpelly, I attempted to approach the place from the south. Starting from Peking, I crossed the Hun-ho at the celebrated bridge Lu-ko-chiau, and went in the direction of Fang-shan-hien, then made for the hills, where the river Liu-li-ho leaves them in a steep gorge, and was fortunate to find a sort of bridlepath, badly in repair and rather dangerous for pack animals, but ascending rapidly the range which divides the headwaters of the Liu-li-ho from the valley of Chai-tang. The Miau-ngan-ling pass, by which I crossed it, has the altitude of about 4,500 feet.* The descent to Chai-tang is steep. The road leads at nearly right angles across the strike of the strata. After having traversed great thicknesses of underlying formations, a great portion of which consists of limestone, I was surprised to walk over a regular succession of coalbearing strata, the thickness of which, estimating it step by step, as I proceeded gradually from the lowest to the highest strata, exceeds seven thousand feet.

Coal occurs at five distinct levels in this succession of strata. In no part of China did I find the productive portion of the coal formations with a stratigraphical development approximating in thickness this at Chai-tang.

The supply of the capital and of the port of Tientsin with cheap and good fuel from the neighbourhood may at any time become an important question, and is already a subject much speculated upon. I hope therefore to be justified if, without going into details of merely geological interest, I enter into a more accurate description of the main features of the section between the Liu-li-ho and Chai-tang. It is indeed the clue for understanding the coalfields around Peking.

The Liu-li-ho, for a long distance before leaving the hills, is cut in limestone which belongs, probably, to what I called in another letter the Nanking-system.† Just before the river enters the plain, the limestone beds are slightly bent in the shape of a shallow trough and, in this, conformably overlain by sandstone and slate which contain several (at least six) beds of anthracite varying in thickness from two to ten feet. We may call them the *Liuli-beds;* they constitute the *lowest and first series of coal-seams.* Quite a number of mines are worked on both sides of the river. The coal is of tolerably good quality, but lacks solidity. These beds of anthracite, which can be always easily recognized by their immediate superposition on the limestone, are mined in several places west of Peking; for instance, at the Ma-ngan-shan, which faces the plain south of the Hun-ho; and at the Chai-to pass, a few miles west of the well-known He-lung-tan temple, and no more than 25 miles, by level road, from Peking. The mines of Fang-shan-hien, which contribute largely to the supply of Tientsin, are probably worked on the same beds. It can safely be presumed, that the Liu-li coal-beds are of all the most widely spread in the vicinity of Peking, because all the overlying strata were to be removed before they could yield to denudation.

West of the coal-mines, the Liu-li-ho is enclosed between nearly vertical walls of limestone and other rocks of still greater age. At the distance of forty li, the little place Hung-mei-chang (meaning "anthracite-market") is reached. Here, the coal, which is brought down the hills on donkeys, is put on camels, to be carried to Peking. The road follows now for thirty li a narrow crevice in the limestone, through which an affluent of the Liu-li-ho descends. At that distance it arrives at the village of Tai-ngan-shan, known to the coal merchants of Peking as supplying the best kinds of anthracite. First, the anthracite-beds of the Liu-li series reappear, overlying conformably the limestone, and following its dip to the west-north-west. Their position, at this place, is unfavourable. Small portions only of the coal-beds were easy of access, and those are worked out. The thickness of slate and sand-stone in which these seams are imbedded is about 600 feet. They are covered by about 1,500 feet of unproductive strata. Then begins the *second series*, commencing with about 500 feet of black coal-slate. The next 1,400 feet contain thirteen coal-beds, most of them varying in thickness from six to ten feet. We may call them the *Tai-ngan-beds.* The highest coal-seam is capped by a layer, one hundred feet in thickness, of a coarse conglomerate of limestone and quartz, which occurs here for the first time, and reappears frequently in higher levels. This magnificent series of coal-beds has, in my opinion, the highest intrinsic value among all which occur in the vicinity of Peking. I have seen them only in this one locality, which is situated at an altitude of nearly four thousand feet and very difficult of access. The strike of the strata is W.S.W.—E.N.E., the dip from 50 to 65 degrees W.N.W., and sometimes approaching the vertical. They run at right angles across some steep ridges separated by deep gullies, and afford therefore great facility for mining. Some beds, where they had a vertical position, have been quarried out from the top of the ridges downward. The place formerly occupied by a coal-bed is now conspicuous as a narrow and deep cut in the hill. A few mines are being worked now, chiefly on the "hu-tsau" or "thick seam," which averages ten feet in thickness, but is liable to considerable swellings. The coal of all the seams is anthracite; all I have seen is slaty, very lustrous, and unusually solid, has a short conchoidal fracture, and contains very little impurities. It is superior to any other anthracite I know from

* All altitudes mentioned in this letter are approximations, based on preliminary and rude calculation of aneroid measurements, and in the case of those mountains which I did not ascend, mere estimates.

† Letter on Nanking and Ching-kiang, p. 9.

the vicinity of Peking. This opinion is confirmed by the fact that, although the coal must be carried 45 li down hill on a steep trail to Hung-mei-chang, which is still 125 li distant from Peking, it can be sold at the mines at the high price of Tls. 10.50 per 100 piculs, and yet compete with the coal from other places situated much nearer the capital. There is no market on hand for small coal. Fortunately there is but little of it. The anthracite leaves the mines nearly all in solid cubical lumps of from one to two cubic feet each, and many are still larger. I have traced the Tai-ngan beds, by the lines of old mining works, for some distance in a south-westerly direction. They continue also with great regularity in the opposite direction, and are probably worked in the mines of Muntakou, situated near the edge of the plain, but appear to be there nearly worked out, so far as the Chinese are able to mine advantageously.

The *third series*, which crops out near the Miau-ngan pass, may be called the *Miau-ngan-beds*. It is separated from the Tai-ngan beds by about 1,000 feet of sandstone. It contains two beds of anthracite, said to be six or seven feet thick each. Their position is not favorable for mining. I do not know of the existence of these beds in any other locality.

I estimate roughly at, at least, 2,000 feet the thickness of the long series of variegated sandstones, shales, and conglomerates which, on the road from the Miau-ngan-ling down to the valley of Chaitang, separate the third series of coal-beds from the *fourth* or *Ta-tsau series*. This consists of several beds of anthracite, enclosed between strata of yellow and black argillite, calcareous marls and sandstones, all of which contain a large quantity of tolerably good iron ore. These strata are very similar in character to those which enclose the great anthracite seams and beds of iron ore in southern Shansi. Also does the anthracite of the Ta-tsau mines resemble closely that of Ping-ting-chau in Shansi, as regards its aspect and large conchoidal fracture. It contains, however, more impurities (chiefly clayey bands) than the other, and soils the fingers slightly when handled, which is not the case with the Shansi anthracite. Although worked now only at the Ta-tsau mine, fifteen li S.S.W. of Chai-tang, this system can be distinctly traced from there over the "Mei-ling" or "Coal-pass" to the village of Ma-ling, nine li from Chai-tang. All the coal accessible to Chinese mining is worked out for this entire distance. The Ta-tsau mine was described by Mr. Pumpelly. I did not enter it, because I arrived there late in the evening. One of the two coal-beds swells, in places, to 30 feet thickness, and is said to average no less than 12 feet.

This system is 600 feet thick. It is immediately overlain by the *fifth* or *Futau series* which carries bituminous coal. To this belong a few mines situated five li south-southwest of Chai-tang, and known as the Fu-tau mines. There appear to be four coal-seams in that place, imbedded in the highest portion of a series of grey sandstones and argillites. The uppermost seam is thin, and no work is done on it. The next one below is said to be from 5 to 9 feet thick, the third from 1 to 5 feet. Both of them swell up in some places to greater thickness, and in others dwindle down to almost nothing. The existence of the lowest seam is only marked, by old works which are abandoned. The coal extracted from these seams is bituminous coal, and Mr. Pumpelly has shown that it is of very good quality, so far as its chemical composition and heating power are concerned. It appears that, at the time of his visit, work happened to be done in places where the coal-beds were unusually wide and, therefore, the coal solid. When I was at the mine, the proportion of lump coal was small, and this had a flaky structure, such as is often found in the neighbourhood of the outcroppings and in much disturbed coal-beds. The owners of the mines complained of the want of regularity in the thickness of the coal, and the position of the seams. Many small disturbances are indicated at the surface of the ground. The 5 to 9 feet seam dips 40 degrees W. N. W. at the surface, and at little distance underground is vertical; the third disappears in some places entirely, and must be traced at considerable expense. At the time of my visit, work was done at two mines only, by about twenty workmen, who were able to take out about 250 catties a day each. The price of lump coal was Tls. 0.1.5 per mule load of about 200 catties, or about Tls. 1.2.0 per ton. Dust coal is sold for local consumption only, at one-fourth of the price of piece coal; and coke at Tls. 15 for 100 piculs. Both the ancient and the present works extend no more than 1,500 feet in length on the hill side.

It is evident, that the idea (which, as I learn, has been suggested) of constructing a rail-road from Peking to Chai-tang, for the sake of the exploitation of the Futau coal-beds, has no support in the actual state of the mines. What is being extracted at present would barely be sufficient to feed the locomotive; and it would be rash to speculate on any great increase of extraction before the locality is minutely examined, and the existence of the coal-beds over a large area, as well as the improvement of the coal in depth, as regards solidity, are proved. It is not likely that the result of such an examination would be satisfactory. The vicinity of Chai-tang has been the theatre of violent disturbances, caused by the eruption of porphyry during or after the last period of the deposition of the coal formations, and the Futau coal-seams suffered most by them. Coming from the south, the disturbances, as well as the porphyry and its accompanying conglomerates, are first met with at the Futau mines. The small extent of the mining ground is not due to the inexperience of the Chinese in tracing coal-beds, but to the fact, that the strata which contain the coal-beds are cut off in every direction, partly by erosion, and partly by the intrusion of porphyry. They occur still in a few other places within a few

miles north-west of Chai-tang, but in each of them much disturbed and limited in extent. Their mode of occurrence in these places makes it, however, probable that the Futau series contains other coal-beds besides those worked at the Futau mines, and that, if the series could be found anywhere complete and in a less disturbed state, it would be extremely valuable.

A railroad to Chai-tang would be expensive, because it must traverse rugged mountains; its sole object would be the transportation to Peking of the bituminous coal of the Futau beds, and, perhaps, of iron which might be made from the ores contained in the Ta-tsau series; it would have its terminus at Chai-tang, as no continuation in any direction is feasible. For the same amount of money which these fifty miles of railroad would cost, another line might be pushed some hundred miles south of Peking, in the direction of the great commercial roads to Shansi, Honan and Shantung, all of which provinces are full of coal-mines and deposits of iron ore, compared with which those of Chai-tang are utterly insignificant. If one ventures at all to frame already definite railroad schemes, those lines should be thought of in the first place, which, while establishing the connection of seaports with great coal-districts, follow at the same time the most important of the actual roads of commerce, and pass the greatest possible number of populous cities. The construction of an almost useless line, to an out-of-the-way place such as Chaitang, would hardly be a prudent commencement.

I regret that I must already break off the meager information which my last journey has enabled me to contribute in regard to the coal-fields in the vicinity of Peking. The establishment of the existence of productive coal formations in an almost unparalleled stratigraphical development, and with an aggregate minimum of one hundred and forty feet of coal (taking 30 feet for the coal-beds of the first series, 65 for the second, 15 for the third, 18 for the fourth, and 12 for the fifth), although an interesting result, is of importance only in so far as it suggests, how desirable it is, and how important for the Chinese Government, to make a minute survey of the vicinity of Peking. I did not describe here the lithological character of the various strata. But it is so characteristic at the different levels, that it will afford a most valuable guide for tracing the existence of coal-beds in places where only the enclosing strata are exposed to view.

No sanguine expectations should, however, be formed on the strength of the great development of the coal formation. It is an unfortunate circumstance that, in the mountains near Peking, the disturbances of stratification have been very great. While their effect has been, on the one hand, to expose to view the various portions of the coal-bearing system, and to make valuable coal-beds (such as those above Tai-ngan-shan) easily accessible to the miner from gorges and hill sides, enormous portions of the same strata were, on the other hand, brought by the same causes into exposed positions, from which they were swept away by the gradual action of water. A few remnants of them is, in fact, all that is left; they are chiefly in those places where enclosing ranges, made up of more ancient formations, afforded protection, or where porphyry and its hard conglomerates have capped the soft strata which constitute the highest portion of the coal formation. To this circumstance alone do the coal-seams of the Futau and Ta-tsau series owe their preservation in the vicinity of Chai-tang, and it is safe to predict that they will be met with in very few other places near Peking. Probabilities are more in favor as regards the Tai-ngan series, and they are greatest in respect to the less valuable anthracite of the Liuli beds. If the Tai-ngan beds should indeed extend from the place where I have described them as far as Muntakou, then they may still form the subject of mining on a large scale and in a conveniently situated place.

2.—*REGION OF SIUEN-HWA-FU.*

Going north from the basin of Chai-tang, we leave the coal region of Peking. Both are bounded in that direction by a rugged range, which trends from south-west to north-east, and attains in its summits an elevation of from 5,000 to (probably) 8,000 feet above the level of the sea. It may be called the *Nankou range*, because the Nankou pass leads through it. Farther west, the Hun-ho intersects it in a rocky gorge. I went straight across it, about twelve miles west of the river, on a bridle-path which connects Chai-tang with the city of Pau-ngan, a distance of fifty miles.

The Nankou range is an important feature in the configuration of these northern regions. From the Miau-ngan-ling (south of Chai-tang), its southern descent presents itself as an almost straight and apparently vertical wall, rising on the other side of the basin of Chai-tang, and separated from its gentler slopes by a belt of rugged hills. These are made up of porphyry, which overlies and cuts off the coal measures. The range itself consists chiefly of Sinian limestone,* the strata of which rise first at an angle of 45 degrees from underneath the coal-basin. At the altitude of 3,000 feet the trail reaches the foot of the wall, and at about 6,000 feet its top. It is built up of nearly horizontal strata of Sinian limestone. A fine view presents itself here of the region to the south. The rugged sea of limestone hills in the background, wild like the

* Letter on Nanking and Chingkiang, p. 7.

petrified billows of a sea beaten up by a typhoon, and the deeply eroded gorges in the foreground, around Chai-tang, are an image of the convulsions and disturbances to which this portion of the coal region of Peking has been subjected. Leaving the broad Nankou range on its northern side, we look down into wide valleys separated by ridges which are enveloped in loess nearly to their top. All these ridges are chiefly made up of Sinian limestone, which has undergone only slight disturbances of stratification. Its total thickness, including several intercalated beds of argillite, exceeds 8,000 feet. The dip is slightly south, and therefore, as we proceed north, lower and lower strata enter into the composition of the ridges.

Already, at the time of the deposition of the first coal measures, the Nankou range formed the shore of the coal basin of Peking. But those of later age were deposited on both sides of it, and several fragments of them are scattered north of the range.

The region between the Nankou range and the Great Wall, so far as it belongs to the province of Chili, form the department of Siuen-hwa-fu. Its area is about 6,600 statute square miles. It is highly interesting, on account of its isolation and peculiar character. In more than one respect it forms the intermediate link between the plain of Peking and the Mongolian plateau. It collects the waters descending from the borders of the latter, in the *Yangho*, and receives those of the *San-kang-ho*, which flows through regions of northern Shansi having much in common with that of Siuen-hwa-fu. These rivers unite, near Pau-ngan-chau, into one single channel, the *Hun-ho*, which, in descending to the plain of Peking, breaks through the Nankou range in a narrow and tortuous gorge. The numerous wagonroads which connect the cities in that region among each other converge in a similar way towards the Nankou pass, which is the only outlet for traffic in a south-easterly direction. Between this and the next western highroad to the south, which connects Ta-tung-fu and Tai-yuen-fu, high ranges of mountains, and the wild country beyond them, restrict all intercourse with the south to a few bridlepaths. The two highroads even can scarcely be called wagonroads, as only empty carts can, with considerable difficulty, be carried over the passes. To the north, on the contrary, there are numerous and easy connections with Mongolia.

Siuen-hwa is eminently a loess-region. Wide valleys prevail. They have little bottom-land. But smoothly, and at a very low angle, the loess rises on either side, frequently to 1,500, and even 2,500, feet above the rivers, and nothing but black pyramidal summits, which overtop the yellow slopes, mark the situation of the enveloped limestone ridges. In exceptional instances only, the limestone rises precipitously from the bottom of the valleys. The rivers, unless temporarily swelled by rains, are shallow, and run swiftly in their wide and sandy beds. They are not navigable.

The climate of Siuen-hwa is very cold in winter, and very hot in summer. The amount of rain appears to be less than it is in the rest of Chili. The soil is fertile, as Loess always is. The products are agricultural, and contribute largely to the supply of Peking with wheat, vegetables and fruit. Next to wheat, the staples of the produce are: Kaoliang, oats, millet, maize, pulse, potatoes. The last are largely raised in this region, as well as beyond the Great Wall, and in the northern half of Shansi. In the valleys they are, like Indian corn, only eaten by the poor; but in the mountains, potatoes have become an indispensable article of food. They are scarcely excelled in quality by any raised in Europe. Yet, their price is generally as low as 400 cash, or 33 cents, per picul. Fruit thrives remarkably well. Chief among them is the grape. Pears, apples, plums, apricots, peaches, persimmon, melons, water-melons are raised in large quantity. They are inferior in flavour to those raised in Europe, with the exception of the apricot. Vegetables are largely cultivated, and are of good quality.

Peking is probably the largest customer for this produce. A considerable amount is also exported to Mongolia, in exchange for mutton, beef, horses, skins, and furs. The only other source of revenue is, the large traffic through the country, on the roads from Peking and Shansi to Kalgan. It employs many hands, and allows the people to dispose of some produce for feeding a large number of travellers and of animals of burden. The population appears to be able to supply with ease their little wants. Probably one-half of the inhabitants live in caves dug out in the loess. The cities have broad streets, but present otherwise an uncomfortable appearance; chiefly Siuen-hwa-fu, the pretentious walls of which enclose a large space not half occupied by dwelling-houses. The only place of importance is Kalgan or Chang-kia-kou, which I will mention again in connection with Mongolia.

The mineral produce of Siuen-hwa is only *coal*. It occurs in the following places:

1st. *Yü-chau*. A fine kind of bituminous coal, sold in solid tabular pieces; burns with little flame and little smoke, does neither cake nor coke, and leaves a very small amount of fine white ash. It has a large conchoidal fracture, is of perfectly black colour and dull lustre. It is said to be mined on one seam only, north of Yü-chau, which lies horizontally and is from 4 to 6 feet thick. At the mines it costs one cash per cattie, at Kalgan, where it is much used, six cash.

2nd. *Si-ning-hien.* A peculiar kind of coal, which must be called anthracite, because it emits neither smoke nor flame, nor any bituminous odour. It is of brownish black colour, has a waxy lustre, small conchoidal fracture, and contains numerous small globules. When lighted, it will slowly glow away, for hours or days, according to the size of the piece, until consumed; no draft of air need be applied. The residue is a white, exceedingly light and flaky ash. The mines are said to be south of Si-ning-hien, on the same range of mountains with those of Yü-chau. At this place, too, one seem only, having a horizontal position and from four to six feet thickness, is said to be mined. The coal is brought to Kalgan in fine solid pieces of a slaty texture. The cleavage planes are often covered with a fine fibrous film which has the appearance of charcoal. This coal is much valued by the Chinese, and said to be used, in open basins, in the Imperial rooms at Peking, to the exclusion of any other kind. With the exception of an occurrence of inferior importance mentioned by Mr. Pumpelly, and a doubtful one mentioned under 6, this is probably the only anthracite-like coal mined north of the Nankou range. The best proof is this, that Chaitang supplies a portion of the department of Siuenhwa, including Pau-ngan-chau, with anthracite. The Sining coal is sold at Kalgan at nine cash a catty.

3rd. *Kiu-Pau-ngan* or *Pau-ngan-chau.* A locality twenty miles west of that city was mentioned to me as yielding bituminous coal. But this statement is doubtful. I visited a place situated sixteen *li* north of Pau-ngan, on the right bank of the Yang-ho. A well developed coal-formation overlies there unconformably the Sinian limestone, and is itself unconformably overlain by porphyry-conglomerate. It contains a considerable number of coalseams. But what was within reach of Chinese mining is worked out, and the mines are abandoned. The mines can easily be re-opened and worked on a larger scale; but I failed to get any reliable information regarding the quality of the coal and the thickness of the seams.

4th. *Sin-Pau-ngan.* This locality, together with the adjoining one at the Ki-mi-i-shan, is mentioned by Pumpelly. It is situated on the left bank of the Yang-ho, and the coal-beds appear to be the continuation of those mentioned under 3. Mining is still done in a place at some distance east of the river, between the hills. The coal brought from there is strongly bituminous, but apparently of no good quality for ordinary use. The range of its consumption ceases with Siuen-hwa-fu, which is situated no more than one hundred *li* from the mines. At Kalgan, the bituminous coal from Yüchau (240 *li* distance) and even of Tatungfu (380 *li*) drive it out of the market. It must therefore be presumed that it is much inferior in quality to both.

5th. The same way of reasoning must create a still greater prejudice against some coal which is said to be mined a short distance northeast of *Siuen-hwa-fu,*

6th. *Tumulu* and *Siau-tung-ko.* I add to the list these two places, because they belong to the jurisdiction of a district (Wan-tsiuen) of Siuen-hwa-fu, although they are situated beyond the Great Wall. Tumulu is a small market-town about fifty miles west of Kalgan. Siau-tung-ko lies six miles farther west. From this place the coal-formation extends twelve miles more in a westerly direction, past the missionary station Si-yin-tse, to San-pau-ko. At Tumulu, anthracite is said to occur, but I do not consider the statement reliable. With that exception, the coal from all localities within the long range is bituminous, and varies little in quality. It has a slaty texture, very lustrous layers changing with others of a dull appearance. All what is extracted is from near the surface. This fact may explain the considerable admixture of pyrites and the softness of the coal. It is a caking and coking coal, gives much flame and smoke, but leaves little ash. This coal is of very recent origin, as is indicated by dicotyledonous leaves occurring with it. It verifies probably Mr. Pumpelly's supposition regarding the Tertiary age of some coal which occurs in two places in the neighbourhood of Kalgan. These are the only instances known in China of the occurrence of coal so recent in origin.

This list comprises probably all, or nearly all, coal-mining localities in the department of Siuen-hwa-fu. Although that region is of little commercial importance, it will always attract some attention, as being the thoroughfare for the few existing natural approaches to a large portion of Mongolia. This situation makes it admirably adapted to become hereafter, together with Ta-tung-fu, a manufacturing country. Mongolia is capable of supplying a great quantity of raw material, such as wool, camels hair, and hides, while Siuen-hwa-fu and Ta-tung-fu possess a large amount of fuel.

8.—*BEYOND THE GREAT WALL.*

The Great Wall constituted in ancient times the boundary between China proper and the territories inhabited by the Mongols. It does no longer occupy this position. The Chinese element has spread beyond it, taking possession of some centres of commerce and of some tracts of arable land. The political boundaries, too, of the provinces of Chili and Shansi have been pushed far into Mongol territory. But these arbitrary lines exist only for the convenience of the present Chinese government, and have nothing whatever in common with the natural boundaries that actually exist between China and Mongolia and are marked in some places, approximately, by the Great Wall. They are, however, not a well defined line, but a belt of territory of varying width, in which the three elements of division, the geological, the geographical and the ethnographical, are singularly intertwined.

A short geological sketch will explain the nature of that belt. I have stated, that, in the region of Siuen-hwa-fu, the rocks of the Peking system, and in particular the Sinian lime-stone, predominate over all else in the structure of the mountainranges which protrude above the loess. Just as, in the Nan-kou range, these rocks rise out of the coal-basin of Peking, they yield, farther north, their place to gneiss and granite, which, being anterior to them in age, rise abruptly from underneath them. They form at once wild and bold mountains, the frontrange of a portion of which was called by Pumpelly the *Barrier-range*. Together with gneiss, volcanic rocks make their appearance. They are spread out over the uneven surface of the gneiss, fill out its depressions, and form a continuous sheet of lava with a gently undulating surface. A few islands of gneiss protrude still above the lava. Now, in quite a general way, the volcanic rocks in this region are the plateau of Mongolia proper, while the gneiss constitutes the descent to China, and makes up the dividing belt. The undulating edge of the volcanic sheet is elevated from 5,400 to 7,000 feet above the level of the sea, while some of the islands of gneiss attain even a greater altitude.

On the volcanic plateau, the water collects, in general, in shallow basins, from which it evaporates. All products of decomposition are therefore deposited in valleys and basins within the area of the plateau, and, notwithstanding a cold and dry climate, give origin to that rich growth of herbal vegetation which is the essence for the existence and occupation of the Mongol. From the belt of gneiss, on the contrary, all the water descends towards the large valleys of Siuen-hwa, and through their rivers to the sea. The volcanic sheet, where it borders the gneiss, is broken off abruptly, its steep walls exposing the vertical structure of the lava. Formerly, it covered the gneiss more extensively, but it has given way to decay, and is still receding very slowly along its edge, chiefly in those few places where a small portion of the plateau is drained towards the gneiss.

The geological boundary is there where the gneiss first rises from underneath the lime-stone rocks, or, at least, from the broad valleys immersed between them. Both the Great Wall and the ancient ethnographical boundary coincide approximately with it. The geographical boundary is, where, together with the volcanic rocks, commences the country without outward drainage. This line is, at the same time, the present ethnographical boundary. The undrained region, which is exclusively inhabited by the Mongol is called by the Chinese "*Tsau-ti*" or "grass land" while the belt of Chinese colonies between it and the Great Wall is the "*Kou-wei*" or the "region outside the gates."

At Kalgan, this belt is very narrow: a short ascent leads from the Chang-kia-kou gate of the Great Wall to the volcanic rocks of the plateau. East of that place, the gneiss-belt attains a considerable width. It constitutes sharp crests, separated by deep and narrow ravines, in which a Chinese population thrives in cultivating patches of loess which, the last remnants of a more universal cover, are scattered from the bottom of the ravines to the top of the ridges. It is surprising, after having crossed over several of them, to see, on arriving on the summit of the last, suddenly a vast grassy plain with undulating surface spread out at a level with it. On the boundary stands the last Chinese village; then follows the Tsau-ti with Mongol tents. West of Kalgan, the belt of gneiss attains even a greater width. It rises precipitously from the loess-valleys of Siuen-hwa and Ta-tung. But, farther off, extends a broad land of gneiss, with wide valleys of from 4,000 to 5,000 feet elevation. The Chinese colonies extend up as far as the drainage is southward. The gneiss, the colonies, and the outward drainage are bounded together by the abrupt edge of the volcanic sheet.

The contrast is very marked, if one descends westward from the Mongolian camp Hanurtai, towards the missionary station Si-yin-tse. After having seen, for days, nothing but grass-land, with here and there an isolated Mongol camp, and with numberless heards of cattle, sheep, camels, horses, and goats, grazing around shallow basins with an undrained pool in the centre, or in valleys descending towards larger lake-basins, and all these depressions separated from each other by long and gently sloping ridges made up of sheets of black lava—one arrives quite unexpectedly, at an altitude of about 6,000 feet, at the edge of the plateau, and overlooks the large flat basin of Tung-niu-kwan. It teems with scattered villages, the houses of which, roughly constructed of loam, could, in November, be scarcely discerned between the high grain-stacks which surrounded them. Although situated only 250 feet lower than the edge of the plateau, it is drained to the sea, and its bottom is granite. The Chinese settlers, all of them men from Shansi, have since a few years advanced to this valley from below, bringing with them their domestic habits, their industry, their implements of agriculture, and their commercial spirit. And on the same extent of ground where, a short time ago, a few Mongols earned a scanty subsistence by letting their heards feed on spontaneous vegetation, a Chinese population, probably amounting to thousands, by substituting systematically planned for spontaneous vegetation, finds not only the means of collecting wealth, but exports the produce of the fields to the neighbouring districts of Shansi, and to the Mongols themselves. The contrast between nomadic and agricultural life is seldom so strikingly exhibited, and however strongly a hasty visit to the "Tsau-ti" may predispose the mind in favour of the frank and hospitable Mongol, that single sight is sufficient to illustrate vividly the superiority of the hardworking Chinese, though the level be low at which the race has stopped on its former road to progress.

The Chinese immigration into Mongol territory has commenced centuries ago. It was, at first, a purely political measure. The Emperor Kang-hi, especially, fostered it, by deporting criminals and building fortified cities. But the most rapid progress in the way of spontaneous colonization appears to have been made in the last decade. From the scanty information I gathered in regard to the subject, the boundary line between Chinese and Mongolians, west of Kalgan and east of the great south-bend of the Yellow River, would coincide very exactly with the divide of the affluents of the Hun-ho and Hwang-ho towards the country without outward drainage. If this is correct, the territory converted there from Mongolian into Chinese would comprise about 6,500 (geogr.) square miles. The country beyond, the "Tsau-ti," is (for the present) reserved for the Mongols by law, and Chinese are forbidden to settle upon it. It is a noteworthy fact that both nations are so strongly separated. While the Chinese have nearly succeeded, in Manchuria, to assimilate with themselves, by intermarriage, and, as it were, to conquer, that race which now rules them, they can gain upon the Mongols only by pushing them back. No intermarriage takes place, and the Mongols do not assume, as the Manchu do, Chinese language and literature. This circumstance renders the Mongols dangerous neighbours, and they may become terrible if their dormant force be wielded by some strong controlling power, whether it be exerted by individuals of their own race, or by a nation superior to them.

The Chinese have built in the Kou-wei several cities, which do the trade of the surrounding districts. The chief produce of the fields, in the highest regions, between about 4,500 and 7,000 feet above the sea, consists in oats, flax, and mustard. The last two are threshed together, and oil is made from the mixed seeds. The fibre of the flax is of inferior quality, and no use made of it. Besides these staples, which are largely exported, buck-wheat and potatoes are raised for home consumption. Below that is another region, where wheat, beans, millet, hemp, and kaoliang are added to the first. The valleys around Kwei-hwa-ching, which are reputed as highly productive, belong to this region. An important branch of business is, the breeding of mules. The immense stock of them employed in China is recruited chiefly from those annexed territories beyond the Great Wall.—The climate of Kou-wei west of Kalgan is dry and cold. The winters are long, and the crops frequently a failure. Yet, good profits are secured by cultivating a great extent of ground. The title to unoccupied land which an individual selects is given by the Yamen. Fifty Taels for 500 mow is a frequently occurring price, but not the rule. Manuring is not required during the first years. As much as possible of the virgin soil is ploughed, with the aid of Mongolian ponies, which are hired at a nominal price. In later years, manure is procured from the Mongolian pastures for a trifling expense. The labour on the field is done by Shansi labourers, who visit the Kou-wei yearly in great numbers and work for low wages.

The mineral produce of the Kou-wei west of Kalgan appears to be small. Besides the coal field of Tumulu, noticed in the last chapter, Mons. Armand David mentions coal-mines near a place "Sartchy," north-west of the south bend of the Yellow River. They supply a large region with bituminous coal and coke, but the city of Kwei-hwa-ching is said to be supplied from the mines of Ta-tung-fu. Salt is made near Fung-ching and Kwei-hwa-ching. Some mineral veins, finally, with copper ore and argentiferous galena, occur in the gneiss east of Kalgan.

Beyond the Great Wall, east of Kalgan, the aggression of the Chinese upon Mongol territory is apparently greater than west of that place, but extends probably not throughout the whole region which is drained towards the sea.

4.—*MONGOLIAN COMMERCE AND PRODUCTS.*

The Mongol is not endowed with any commercial spirit. He loves money, and likes, too, to spend it liberally. In purchasing, he is not so much directed by the value of a thing as by the fancy he has for it. Such people are, of course, easily duped by their shrewd neighbours, to whom commerce is the essence of life; and the Shansi-merchants who have monopolized the Mongolian trade are enriching themselves fast with its spoils. The products of Mongolia are few. Horses, cattle, sheep and camels occupy the first place. Valuable furs range next. Of raw produce, the country furnishes: hides, wool, and camels hair; of manufactured goods: the prepared skins of sheep and goat, a sort of felt, and so-called Mongolian cheese and butter. Vague rumours of the occurrence of coal in Mongolia are current among foreigners; but I failed to find them authenticated.

The Mongols purchase from the Chinese: cotton-cloth, chiefly from Hupè, tea, and tobacco. They are fond of small ornaments, arms, knives, all sorts of coloured cloth, fine blankets, and many little articles of luxury, and have a taste for what is good and solid. Chinese industry, chiefly that of the north, is little adapted to supply these fancies, and there is room for a small but remunerative trade with European goods, of which the Mongols are exceedingly fond. They are now provided only with inferior ware. The wealth of the Mongols is by no means inconsiderable. The money they earn for live stock reared almost without expense and brought to market on its own legs amounts to very large figures. Although considerable sums go to temples and lamaseries, it is difficult to see what becomes ultimately of these profits.

The centres of commerce, in the south, are Kalgan, Kwei-hwa-ching and Lama-miao. Of these, Kalgan appears to be the most important for transit and entrepôt, but to be much surpassed by the others as regards real trade.

There are two directions taken by the commerce bound for Mongolia from the south. One is by sea, and the other by land. Those goods which come by sea are transhipped at Tientsin, and enter Mongolia, almost without exception, by way of Kalgan. The land-commerce converges from various directions in northern Shansi, and then branches off on two roads, one of which passes through Kalgan, while the other goes directly to Kwei-hwa-ching. From Kalgan, the commerce spreads in three lines, namely to Kwei-hwa-ching, Urga with Kiachta, and Lama-miao.

Kwei-hwa-ching, the ancient *Kukukhoto*, is now an entirely Chinese city, said to be very large, and the seat of an extremely lively commerce. The Chinese merchants themselves have in their hands the great traderoads from there to Uliassutai and Kobdo, to Hami and Ili, and to Ning-hia-fu, all of which places are other centres of Chinese trade, while the Mongols repair to Kwei-hwa-ching by many other routes of minor importance. Of late years, the trade on those great roads has diminished, on account of troubles connected with the Mahomedan rebellion of the northwest. Yet, the commerce of Kwei-hwa-ching is large, because it commands a very extensive portion of Mongolia.

Lama-miao, which is still often designated by its Mongol name *Dolonór*, is said to be of less importance, and supplies a smaller extent of country, than its western rival.

Kalgan, or *Chang-kia-kou*, has little trade of its own, and is chiefly known as the key for a good portion of the Siberian and Russian commerce. This transit-trade is, however, surpassed in importance by that to Mongolia. To it is owing the conflux of people in Kalgan. Reports on this place have been made from so competent sides, that I cannot aspire to add to them any information of value. It is rare, even in China, to witness, in the same degree as here, an extremely lively commercial intercourse. The streets are thronged with people, carts, camels, horses and mules. An incredible amount of small bartering, exchanging, equipping, approvisioning is constantly going on, owing to the existence of a fluctuating population said to amount to tens of thousans. Also of the resident population the greater part consider themselves as visitors on a long term, and have their families in some other place or province. Kalgan is the terminus of transportation from the north as well as from the south. Animals of burden and other means of conveyance are changed, and a considerable commission business is made by the attending change of contracts.

Among the trade-roads starting north from Kalgan, that to Kiachta is chiefly conspicuous, on account of the transports of tea which go over it. Besides the shipments made by Russian merchants, large quantities of tea go through Kalgan on native account. On the highroad through northern Shansi, I was almost daily addressed in Russian, by Chinese merchants accompanying long caravans of camels loaded with brick-tea, and destined for Kiachta via Chang-kia-kou. This tea is from Hupè and Huuan, and goes from Hankau, by way of Fan-ching and Shi-ki-chin, to Shansi, where it passes through Lu-ngan-fu, Tsin-chau and Tai-yuen-fu. Thirty-four miles southwest of Ta-tung-fu, the road forks. One portion of the tea goes directly to Kwei-hwa-ching, and the other to Kalgan.* It is known that the teas for Russia passed formerly through Shansi. Undoubtly they took the road here indicated. Of late years, before the opening of the Suez-canal caused the Russian teas to take quite a different direction from Hankau, it was contemplated, to re-open the old road through Shansi, and to transport the tea via Kwei-hwa-ching, Uliassutai, and Kobdo to Russia. It is evident that on this road a great saving in distance would be effected, as compared with that by Kiachta.

5.—*THE LOESS.*

The daily renewal of my experience with regard to the loess-formation during the first half of my last journey, and its paramount importance in the economy of the northern provinces, may excuse it if I venture to return once more to this subject which I have already treated in one of my previous letters.† I am able to speak now more positively about it in many respects, and hope to present it under some new points of view which may be of interest in an economical respect.

I will repeat from my first description, that the loess is a solid but friable earth of brownish-yellow colour, and, when triturated with water, not unlike loam, but differing from it by its highly porous and tubular structure;—that these tubes are often lined with a film of lime, and ramify like the roots of plants;—that among the constituents, very fine sand and carbonate of lime predominate next to the argillaceous basis;—that the loess spreads alike both over high and low ground, smoothing off the irregularities of the surface, and that its thickness exceeds often considerably one thousand feet;—that it is not stratified, and has a tendency to vertical cleavage;—

* The amount of tea shipped on Russian account via Kalgan is well known from the Customs reports of Hankau and Tientsin. The quantity of both brick and leaf tea shipped from Hankau, in 1871, on native account, through Shansi to Kalgan and Kwei-hwa-ching was given to me, at Hankau, as 280,000 piculs.

† Letter on Honan and Shansi, p. 9

also, that the loess is full of fossil land-shells and contains bones of land-quadrupeds, but no remains either of marine or of fresh-water shells.

The loess is peculiar to northern China, and does not spread over the southern provinces. Chili (with the exception of the alluvial plain), Shansi, northern Shensi, Kansu, and northern Honan are covered with it. In southern Honan and in Shantung it is spread over large areas; but the mountains in these two regions are free from it, and it is extensively overlain with the alluvial soil of the plains. It disappears gradually towards the lower Yang-tse and the lower Han-river, the last insignificant remnants appearing on Tung-ting-lake, Poyang-lake, and near Nanking. Farther west, the limit is very sharp. The Tsing-ling-shan, which divides northern and southern Shensi, is covered with loess on its northern slope. But that formation disappears completely on its southern side. Not a trace of it does exist in Sz'-chwan. I do not positively know, how far it extends in the direction of Central Asia. It appears to continue to near Liang-chau-fu in western Kansu, that is, to the confines of the basin of the Yellow River. Beyond it commence those regions where the waters collect in inland basins. In these, the loess appears not to be conspicuous. Towards the east I know it to the vicinity of Mukden.

It is owing, in a great measure, to the existence of the loess, that northern China differs much from southern China, as regards scenery and products, the mode of agriculture and the means of transportation. In the loess regions, the mountainranges are usually buried in loess with their lower portions, and the space between two ranges is occupied by a broad trough of loess, sloping very gently down from either side. There are instances when the trough closes on all sides, so as to form a basin filled with stratified soil in the bottom, which bears witness to the former existence of a lake in its place. I shall have to mention several basins of this kind in the province of Shansi. In most instances, however, the slopes of the loess extend down to the river that drains the trough. Then the alluvial bottomland is, at the best, very narrow, while the beds of the rivers are in general wide and sandy, the streams themselves shallow, and, with some exceptions hardly worth noticing, unfit for navigation. In some cases, as on the Wei-river in Shensi, there is a gradual slope on one side of the river, and a steep mountain-wall on the other. Besides occupying the intermediate spaces, the loess spreads over the mountains themselves. Where they form tablelands, loess constitutes their flat summits, and the rocks are exposed underneath it, in the eroded watercourses. Where mountainranges are narrow and precipitous, loess still spreads over the passes; it opertops the rocky precipices, and creates isolated patches of soft soil with gentle outlines, in places at great altitudes and difficult of access.

The difference of level of the places where the loess occurs is truly remarkable. Where its hills fringe the plain of the lower Yellow River, they rise only a few hundred feet above the level of the sea. But in climbing up to higher regions, one never loses sight of the yellow soil. In Shansi, I found it largely predominating over everything else, at all altitudes up to 6,000 feet, and met it in many places of greater elevation, on the Wu-tai-shan at 8,000 feet. Yet its character is always the same, the only differences being these, that, where it lies in great thickness, its lowest portions are of a reddish colour, and where it adjoins a mountainrange, deep cuts will expose layers of rocky débris intercalated more or less frequently between those of loess. They continue for some distance from the hills which furnished their material, until they wedge out between unstratified loess; they designate therefore no planes of stratification. The loess is always completely unstratified.

It must, however, be remarked, that in many places occurs what may be called *regenerated loess*, that is, loess carried away by water and redeposited in basins. All alluvial plains in the loess regions are underlain by it, and where rivers are cut through the alluvial soil, they expose it to view. This formation *is* stratified. To a superficial observer it will appear like true loess, but it differs from it in many essential respects. I will only mention these, that it is impregnated with saline matter which effloresces from the exposed surface, and that water will stand in pools and ponds on its surface, while the loess, on account of its porosity, sucks it up like a sponge.

Agriculture and human habitations are confined, in the north of China, to the alluvial soil and loess. After leaving the Great Plain, the first is very scarce, and the loess almost monopolizes the agriculture. If it did not exist, northern China would probably be a barren country. Where it is absent, the mountains of the northern provinces present, without exception, that arid aspect which is known of the Shantung promotory and the hills near Chifu. They bear almost no trees, and few shrubs, and the low herbaceous vegetation is prevented from being luxurious, by the custom of the inhabitants to tear it out with the roots, in winter, and use it as fuel. This is almost the only use to which the hills not covered with loess are put. Agriculture commences immediately with the appearance of the loess, and is coextensive with this formation, following it into every nook and corner, and to every altitude. This circumstance gives rise to one of the most distinct points of difference between the north and south of China. If we except Sz'chwan and (probably) Yunnan, the southern provinces present the remarkable spectacle, that the hills, although inviting cultivation by the most luxurious growth of spontaneous vegetation which clothes them, are, as a rule, excluded from it, with the exception of those limited portions of their slopes which allow of terracing and artificial irrigation. Notwithstanding a warm and fertile,

which allows two and, often, three crops a year, we see agriculture rarely extending to more than a few hundred feet above the plains and valleys, and far inland it attains seldom the altitude of 2,000 feet above the level of the sea. In the north, on the contrary, no altitude to which loess rises is too great for agriculture to follow it. In the Kou-wei, I found the loess extensively spread at 7,000 feet altitude. It was covered with fields, and many villages stood between them. But the most striking instance I have seen is on the Wu-tai-shan, in northern Shansi, where the loess-ground is cultivated at an altitude which is probably no less than 8,000 feet.

These facts will suffice to show the vast importance of the existence of the loess, for agriculture. But there is another point of view which puts it into a more prominent light. I have pointed out on another occasion,* that it appears that the Chinese are able to cultivate only a certain portion of the soil, which bears a direct ratio to the quantity of manure they are able to supply and, in second order, to the density of population. I illustrated this statement by the slow rate at which the grounds left uncultivated in Kiang-nan and Che-kiang, in consequence of the depopulation by the Taiping rebels, are regained to agriculture.

This remark is not correct as regards loess-regions. Shensi was depopulated by the Mahomedan rebels during the last decade, at least as much as Nganhwei by the Taiping's. Among the ruins of villages which counted their houses by hundreds, there are frequently no more than half a dozen inhabited at present. And yet, it appears that, within the short space of two years, since the withdrawal of the rebels from Shensi, the whole ground has been regained to cultivation. I travelled in the valley of the Wei-river a distance of 250 miles, and seldom saw an acre of loessfield that was not cultivated. The disproportion of the number of the population and the extent of ploughed ground was perfectly amazing. And yet, there is no cattle kept for manuring purposes. There are two reasons that may explain this extraordinary difference in the rates at which the ground is recultivated in Shensi and in Nganhwei. Firstly, no kind of ground is easier ploughed than loess. A little loosening of the surface is perfectly sufficient for most purposes, as the ground is light enough for water to penetrate. Secondly, loess yields crops without manuring. The farmers on the Wei-river stated, that not half the ground is manured; that manuring increases the yield in grain, but a satisfactory crop can be obtained without its application, provided the ground receives a sufficient quantity of rain. This is a startling fact, if it is considered that the valley of the Wei-river has probably been under cultivation since several thousand years. I must, however, modify the generality of my statement. A certain kind of manure is indeed generally applied. It is loess itself. The fields are encased, on two or three sides, between vertical walls of loess. Every year, some inches of the earth are cut off from them, and the field covered with it.

There are two causes which render it probable, that loess, where it is normally and largely developed, cannot be exhausted. The first relates to the organic substances required by the vegetation. They are, chiefly, carbonic acid and ammoniac. It is probable, that the great porosity of the loess, shared by no other kind of soil in an equal degree, renders it capable to absorb these gases from the air in an extraordinarily large proportion. The second refers to the anorganic substances. They are likely to be supplied by a process due to the same property of the loess. In the absence of any planes of stratification, the rain-water descends far into the porous loess, and meets the humidity retained in its lower portions; and, in obedience to the well-known laws of the diffusion of liquids, the substances which are kept in solution below will be communicated to those portions of the water next to the surface, and be taken up by the vegetation, so far as required. The process is the same as the familiar one by which certain substances which are constituents of the soil far below the surface are caused, by rain-water, to appear as efflorescences on the surface.

The want of a sufficient quantity of rain will, therefore, be doubly injurious for the loess-regions, and, as a rule, very good crops change with very bad ones, years of plenty with such of famine, which is indeed the case throughout the north.

As regards the kinds of agricultural products raised on the loess, I shall have occasion to mention them in connection with the different regions which I traversed.

Next to its mode of distribution and its porosity, the most important feature of the loess is, its tendency to vertical cleavage, which gives rise to extraordinary peculiarities in the configuration of its surface. No scenery presents smoother and gentler, and more monotonous outlines than a loess-basin, if overlooked from a high point of view. The general inclination, in very large basins, exceeds seldom two feet upon one hundred. The country would appear to be most perfectly adapted for cavalry. And yet, loess-basins are impassable, even on foot, if the very carefully traced roads are not kept. Who leaves these, is perfectly lost, and will have more difficulty in getting a-head, than he would among rocks and cliffs. For, in every direction, he will find himself suddenly before a crevice with vertical walls, perhaps no more than a few yards wide, yet from 40 to 200 feet deep. Following it in an up-hill direction, he will find it to have

* Letter on Chekiang and Nganhwei, § 14.

miles in length, and to ramify into several crevices, and each of these to branch out again, until, by constant multiplication, they become innumerable. Following the first chasm down the hill, he will soon find himself on a narrow spit caused by the joining of a second chasm with the first; and if he could follow it farther down, he would see more and more branches coming in, each of them enclosed between high vertical walls, and increasing in width and depth. The even ground above slopes down to them in a number of terraces with vertical faces, and ends frequently in a last vertical wall five hundred feet high, which descends to a rivulet below. If a birdseye view could be taken, it would show the river, which flows in the axial bottom of the trough, fed by a great number of gullies descending from its sides, every one of them resembling a trunk growing out of an infite ramification of roots and rootlets. Where the main river winds its course through alluvial soil in the shallow bottom of a trough, intercommunication is easy on this low land, and from it, every one of the ribs forming the divide between two systems of gullies can be ascended without difficulty. Frequently, however, the loess extends across the valley at a much higher level than that of the river. Then the continuity of the trough is interrupted by a deep chasm, narrow in the bottom and lined by vertical walls, but widening higher up by a series of irregular terraces. Such chasms are often over a thousand feet deep. The road must then leave the river, and go across gullies and dividing ribs. With extreme difficulty, very circuitous lines are found that afford a grading which renders intercommunication not quite impossible.

Such is, more or less, the nature of all loess-basins. Nothing is more deceiving than their apparently gentle outlines. The manner in which the gullies are formed and widened can still be distinctly seen. Water undermines a loess wall, and large vertical slabs tumble down, widening the gully. The manner in which it grows in length illustrates curiously the tendency to vertical cleavage. Following one of its last branchelets up to its place of origin, we find its width in the last portion generally no more than 3 or 4 feet, and its depth from 30 to 50 feet. It terminates obtusely, with a vertical and concave face. But the tendency to cleavage in the direction of the chasm continues beyond that place. Water, penetrating from the top through invisible fissures, oozes out at the bottom of the terminal edge, causing there a retrograde erosion of the soil. After some time, a round and perfectly vertical pit is formed, a few feet back of that edge, by the tumbling down of a portion of the earth which had lost its support below. This pit is now the real end of the gully, although still separated from its visible portion by a solid bridge, which yields gradually to decay. In a similar way to this, a pit is occasionally formed near the side of the chasm, in a place where the water happened to find some fissure. In this case, too, it commenced carrying away the earth next to the bottom of the chasm and, by undermining, cause the ground above to cave in the shape of a pit. This cylindrical hole is the beginning of the formation of a secondary gully, which, in the course of time, proceeds backwards in the same manner as the first, and will itself give origin to other branches of the third order.

Imagination, following up these simple processes of erosion, can easily conceive how, in their endless combination, they must result in the creation of the most curious and fantastic configuration of the surface. Wide chasms are surrounded by castles, towers, peaks, needles, all made up of solid yellow earth, between which small and large gullies radiate labyrinthically upwards, into the walls of solid ground around. High up on a rock of earth, steeper than any rock of stone, stands the temple of the village, or a small fortress, which affords the villagers a safe retreat in times of danger. The only access to such a place is by a spiral stairway dug out within the mass of the bluff itself. In this yellow defile, there are innumerable nooks and recesses, often enlivened by thousands of people who dwell in caves dug out in the loess. Through every gully they climb up to their fields, each of which is a small terrace for itself, encased by vertical walls on two or three sides, and descending in another wall to the next field below. The natural tendency of the loess to form terraces assists here the Chinese in their endeavour to convert sloping ground into level fields ascending by steps—if it did not, perhaps, give the first origin to that habit. There are indeed few other lines in loess-scenery but horizontal and vertical ones. Looking down a slope of loess, nothing is visible but fine green fields; looking up, all is yellow and cliffy, because only the naked vertical walls of the terraces can be seen.

The majority of the people inhabiting loess-regions live in caves. They select, with great skill, those places where the ground is firm, and many a cave has been inherited down through several generations. The loess contains always solid nodules of a calcareous or, rather, marly substance.* An excellent cement is made of them, and the walls of the caves are lined with it.

* It is the fact of the occurrence of these calcareous nodules which has induced Mr. Kingsmill, in a paper recently published, which I received after the closing of this letter through the kindness of the author ("The probable origin of deposits of 'loess' in northern China and eastern Asia" by Thomas W. Kingsmill; Quart. Journ. of the Geological Society, for Nov. 1871), to assume that the loess is stratified. And indeed, such an opinion may be easily formed, if the opportunity for observing the nature of the loess is limited to a few places. Those elongated and rather phantastically shaped nodules, the well-known "Loess-Maennchen" (loess-men) of the German peasant, are very frequent wherever loess occurs. Generally, they are distributed through it without regularity or order; but frequently they are particularly crowded along certain planes, which are slightly inclined, or approach the horizontal. These planes interrupt the continuity of unstratified loess at intervals of from ten to five hundred and more feet, and assist considerably in the natural formation of terraces. But they lack the requirements of planes of stratification, such as the horizontal position of the flakes of mica, and appear rather to indicate the record of periodical events that happened during the time of the formation of the loess and were attended with a slight

Many of these dwellings are comfortable, and well lighted; they are warm in winter, and cool in summer. In a place that is considered favourable, thousands of caves are frequently crowded together in a small space. The presence of drinkwater has much to do with the selection of these places. It is usually got in wells, at the depths of from sixty to eighty feet, but has always an alcaline taste, and contains much lime. I have never seen a spring issuing from loess, and, not improbably, that never occurs. But copious springs issue at the bottom, where the loess rests on other rocks. The gullies carry water when it rains; otherwise they are dry, excepting those which penetrate through the loess to the underlying rock. A brook forms in them, fed by springs, and continues to flow in the gullies below, even if encased in loess only, because an impervious layer of loam has formed in their bottom.

The construction of roads on loess is, in view of its peculiar features, a hard problem, in many instances; and the engineer who shall have to build the first railroad across it will find himself in the face of difficulties unknown in other regions. The tracing of a line on the divide between two systems of gullies is comparatively easy; but that is not so often required as to cross gullies and divides. Besides, the slow changes which work their way irresistibly must be provided for. In the history of the loess-regions, the difficulties of intercommunication have certainly contributed much to determine the success of wars. Scarcely anywhere is there so much opportunity given for entrenchments, and armed resistance in naturally fortified places. The Tung-kwan gate, of which I shall speak in another page, is only one among the numerous instances that are constantly met, illustrating the effect which the defence of a single place of access in loess-narrows must have against an aggressive force.

With regard to the mode of origin of the loess, I will not detail, at this occasion, the many additional proofs which I collected, against the assumption of its aqueous origin, and in favour of the theory proposed in my "letter on Honan and Shansi" of its subaërial formation in a region without outward drainage, as the collective residue of uncountable generations of herbaceous plants, assisted by the large amount of material which was spread over the prairy by wind and water, and kept there by the vegetation. We are not accustomed to ascribe to currents of air that influence upon the deposition of solid matter which we see daily illustrated in the work done by currents of water; simply because, under ordinary circumstances, those aërial deposits play a too insignificant part to attract our attention, and are soon swept away by water. Things are quite different in an extensive steppe without outward drainage, such as the whole north of China must have been formerly, and central Asia with Mongolia are to this day. Rains are scarce in such regions, and the decomposition of the rocks proceeds slowly. Yet it does proceed. The winds, on the contrary, are strong. They will carry off those products of decomposition from the rocks, and distribute them as dust among the herbaceous vegetation. There the dust materials rest, for there is no means for them to be carried farther away. And if rain falls, the water will flow down from the rocks, and spread out upon the gentle slopes, taking with it the products of decomposition, to feed the vegetation with those that are in solution, and to heighten the ground with those mechanically distributed. No stratification can take place, and any approach to it will be completely effaced by the roots, which descend vertically, and are probably the chief agents to produce the lasting tendency to vertical cleavage. What is forming now on the hill-sides, in the valleys and basins, of Mongolia, is probably loess, though perhaps of a peculiar kind near the edge of the plateau, because the material is taken from volcanic rocks of a certain composition. Loess cannot be recognized on the surface, where it is covered by vegetation and a dark colour imparted to it by organic matter; its character becomes only conspicuous in vertical sections. When the edge of the volcanic sheet of southern Mongolia shall have receded so far that some inland basin, such as that of the Anguli-noor, shall be drained to the Yang-ho, then the water will cut deep furrows into the soft soil of the basin, and expose its structure, which will be stratified in the central portion and show the peculiarities of redeposited loess, while the sides will show no stratification and shall have probably the structure of true loess.

Exactly the same configuration that would result from this imaginary deep drainage of the Anguli-noor, is presented by every loess-basin. The general surface, with gentle outlines, which is seen in overlooking the whole basin, is still, more or less, an approach to the form of the ancient surface, dating from that time when the water collected in the bottom of the basin and evaporated there. Later, an outward drainage was effected, and then only commenced the erosion of the deep gullies, and the gradual creation of all those peculiarities in the formation of the surface, which we behold to-day.

change in the nature of this earth next to the surface as it existed in those various epochs. Later, when the growth of the formation had effaced these ancient surfaces, it could easily happen, that the percolating water would deposit the carbonate of lime it carried in solution in greater quantity along some of those planes than through the body of the rest of the loess.

I anticipate the last paragraphs of this chapter, by adding, in connection with this subject, that some other of Mr. Kingsmill's objections against the theory of the subaërial formation of the loess, as advanced by me, are already provided against, by the additional description of the formation, contained in this letter, while this is not the place to discuss his arguments in favour of a marine origin of the loess, for the sake of which Mr. Kingsmill is obliged to assume, that eastern Asia was submerged at least 6,000 feet below the level of the sea at a very recent epoch. That dust-storms should be considered "a means utterly inadequate to the end" is not surprising, as we have so little evidence of their possible effects presented to our observation. But it must be borne in mind, that the mountains of the northern provinces were chiefly made up of the sandy and clayey postcarboniferous strata, which yielded rapidly to decay.

I have devoted to the subject of the Loess more space than may appear campatible with the scope and object of this letter. But I hope you will grant indulgence for this length, in view of the fact, that the loess determines the physical features of regions at least 250,000 square miles in extent, and that to describe the loess is, to describe that which distinguishes northern China from the rest of the Empire, and what influences, and has influenced, more than almost any thing else, its productivity, its adaptedness for mankind, its means of intercommunication, and its history.

6.—*TA-TUNG-FU, AND THE VALLEY OF THE SAN-KANG-HO.*

I returned from the Kou-wei to China proper through the *Ching-chwan-kou* gate of the Great Wall, 20 miles north of Ta-tung-fu. The gate is ten feet high, and constructed of three crooked pieces of wood. The wall was once built in large proportions and provided with numerous towers, but the material applied being sundried bricks of loess, it is decayed. Yet even these ruins, running straight across hills and valleys, do not fail to convey a grand impression.

Ta-tung-fu is a well-built city, situated about 4,000 feet above the level of the sea, in a valley eighty miles long from southwest to northeast and twenty miles wide. The bottom of the valley is level, with the exception of a few low and loess-covered volcanic hills in the centre. Around these, the ground is full of alkaline salts, which give rise to the manufacture of soda. The fertile ground is very limited in extent, sand and alkaline clay prevailing over it. The crops are, kaoliang, oats, millet, buckweat, peas, black-beans. The population is thin; the villages along the road are almost made up of inns.

Two mountainranges parallel to each other and trending from SW. to NE. enclose the valley. That on the northwestern side is visible from it as a straight wall, at least seventy miles long, and rising from 2,000 to 3,000 feet above its base. With it commences the *Coalbasin of Ta-tung-fu*, which is one of the prettiest coalbasins of China. The precipitous wall —in some portions only its foot, in others the entire wall—consists of the rim of the basin, made up of gneiss and Sinian limestone, and the same rocks constitute the floor of the coalformation, so far as it can be seen. The coalbearing strata are horizontal within the basin, and covered by great thicknesses of sandstone, but rise slightly towards the outer wall, and the coalseams crop out extensively on it, above the limestone. The mines extend about thirty miles aleng the line of outcroppings. In one place only the coalbeds are opened a little way off from these. It is in the deep gully of *He-ku-tse*, twenty miles southwest of Ta-tung-fu. The coal is mined there under waterlevel, and shows a great improvement upon that which is taken, at less expense, from near the outcroppings. I visited only one of the numerous mines of He-ku-tse. It may be worth a brief description. The mine is 250 feet deep, and worked by two shafts. One is vertical and very well constructed. Through it the water is raised in large buckets of rawhide, by means of a windlass worked by six men. The other is excavated in the curious shape of a spiral, and provided with stairs. It is used for the extraction of coal, and large enough that one line of men coming up with loads of coal can conveniently pass the line of others who go down with empty baskets. The thickness of the coal-bed varies from twenty to thirty feet. It is a fine black coal of laminated structure and moderate lustre, perfectly clean, and very solid. It burns with a bright flame, giving little smoke. The bitumen is soon burnt out, and then the coal keeps glowing for a long time, leaving finally a little loose white ash. It does not cake, and cokes little. Its only impurities consist in a few clayey bands which contain sulphuret of iron. The coal leaves the mine in fine solid lumps. It is sold at 160 to 200 Ta-tung-cash for a mule-load of about 200 catties, which is equal to Tls. 0.5.0 to 0.6.2 per ton. For taking it to the mouth of the mine, 120 men are empl yed, who go in and out twenty times a day each, and bring up 25 catties each trip. The amount of daily extraction can therefore be safely put down at 500 piculs; the yearly extraction at about 14,000 tons.—Above the big seam which I have described there are a number of others which are too small to be remunerative at the side of it, but are worked in other places nearer to Ta-tung-fu. The strata below the big seam have not yet been examined.

So far as I am enabled to judge, this is an exceedingly fine coalfield. The strata appear to be quite undisturbed, and I know of no other seam of bituminous coal of equal thickness, in China, of which the contrary is not true in a fatal degree. As to quality, the coal ranges high. Its worst feature is its situation so far out of the range of supply for the purposes of foreigners. It will probably be never of any avail for these. But if ever the difficulties which the Nankou pass presents for building a railroad through it should be surmounted, the coalfield of Ta-tung may come to be of importance for a much more extensive region than it is now able to supply. Steamcommunication with Kwei-hwa-ching would find here a reliable basis. That place imports at present its coal from Ta-tung-fu.

7.—*THE PASS AT THE YÈ-MEN-KWAN.*

Five roads leading out of the basin of Ta-tung-fu are worth noticing. The first is a cartroad to Siuen-hwa-fu (360 li), Kalgan (380 li) and Peking (720 li). The second is a cartroad to Tai-yuen-fu (720 li); the third, a cartroad from Ta-tung-fu, through the Ching-chwan-kou gate of

the Great Wall, to Kwei-hwa-ching, and Mongolia in general; the fourth, a bridlepath from the upper end of the Sankang-valley (above Tso-chau), to Pau-te-chau on the Yellow River. It is reported to be very mountainous. At Pau-te there is a passage across the Yellow River, which was much in use before the rebellion for traffic to Yu-lin-fu and the Ordos-Mongols. The fifth road starts 35 miles southwest of Ta-tung-fu into the coal-basin, passes the coalmines of Wu-kia-kou, and goes, by way of Tso-yuen-hien and the Sha-hu-kou gate of the Great Wall, to Kwei-hwa-ching. I do not know whether it is passable for carts. Near the gate it is joined by a mule-trail from Ta-tung-fu. All goods going to Kwei-hwa-ching from Shansi, or passing through the province with the same destination, and coming either from Hwo-lu-hien,* or from Honan and Hupè, take the Sha-hu-kou-road.

I followed the highroad to Tai-yuen-fu. It goes 77 miles up the valley of the San-kang-ho, and then crosses the *Man-tou-shan* range, which borders it to the south, by the Yè-men-kwan pass. One of the branches of the Great Wall runs along the northern foot of the range, and the pass itself is fortified. The highest point is situated about 2,000 feet above the valley of the San-kang-ho, and 2,500 feet above that of the Pu-to-ho, which follows to the south. The last portion of the ascent from either side is very steep, and carts must be unloaded to go across. It is an important passage, strategically and commercially. In the whole of China proper there are only three roads leading to the far north. One is through the Nan-kou pass, the second is over the Yè-men-kwan, the third is in Kansu; it goes from Lan-chau-fu to Ning-hia-fu.

The lively traffic on the road conveys an idea of its importance. I calculated, that at least 2,000 pack-animals, going from south to north, passed the gate on the top of the pass, on the day when I went through it. Among others, there was a train of 300 camels loaden with (900 piculs of) Chinese cotton-cloth, going from Hwo-lu-hien to Kwei-hwa-ching; caravans of from 60 to 100 camels each, carrying tea from Hupè to Kalgan; others with tobacco from Kiu-wu-hien in southern Shansi; wagonwheels, axletrees, and other articles of wood, from Hin-chau, a little distance south; iron, from Lu-ngan-fu; sugar from Hwo-lu-hien, &c. Long trains of donkeys carried fruit from Tai-yuen-fu to Ta-tung-fu and Kwei-hwa-ching. I looked in vain for foreign goods. From south to north were going: mustard; oil of linseed and mustard; soda in bricks, from the mart Kin-Tai-yo in the valley of Ta-tung-fu (sold there at 18 cash a cattie); some salt from Tung-ching and Kwei-hwa-ching in the Kou-wei; then, a large drove of oxen, from Lama-miao; a great number of mules; heards of sheep and pigs. Nearly all the traffic which goes north is bound for Kwei-hwa-ching and Chang-kia-kou, while the southward-bound goods go chiefly to Hwo-lu-hien and various plaoes in the plain of Tai-yuen-fu, whence they are further disposed of.

8.—*BASIN OF TAI-CHAU AND HIN-CHAU.*

South of the Man-tou-shan range, we arrive at another large basin. It has a cemicircular shape, and stretches around the western foot of the great Wu-tai-shan mountains. The river *Pu-to-ho* flows through its whole length. It enters the basin at, or above, Fan-chi-hien, passes by Tai-chau and Kwo-hien, and leaves the basin below the market-town Tung-yang-chin. Here it enters a rocky defile, and descends through steep gorges to the Great Plain, where it passes near Ching-ting-fu. The basin consists, chiefly, of loess, but contains, besides, extensive bottomland along the course of the river. The greatest expanse of level ground is in the region of Ting-siang-hien, Hin-chau and Tung-yang-chin. Much of it is sandy, or impregnated with salts, but other portions are very fertile. So remunerative is agriculture in these, that the ground which can be irrigated, and on which two certain crops can be raised, is sold at Tls. 70 a *mou*, while the "dry" loessfields, where the success of the farmers labour depends upon the quantity of rain they receive, and no more than one crop can be raised, are worth Tls. 10 for the same unit. The irrigated ground is planted with vegetables and poppy. The opium is sold at 540 cash per tael; it is not exported, since the quantity produced is barely sufficient for local consumption. On the southern slope of the Wu-tai-shan, the poppy is planted, in protected places, at an altitude of about 6,000 feet.

The southern portion of the basin is inhabited by a numerous and wealthy population, living in well built cities and villages. As the produce of the country is not sufficient for their subsistence, and they must depend, to a great extent, on imports, in return for which they do not furnish any exports, either of raw produce or manufactures, it is evident that the wealth must have its origin in a source of a peculiar kind. It is derived from the commerce beyond the Great Wall, of which the people of Hinchau have appropriated a considerable share. They had formerly their houses established along the whole road through Kansu to Ili, and continue even now the commerce in those distant regions, as well as they are able to do under the difficulties created by the Mahomedan rebellion.

I devoted several days to a very interesting trip across the Wu-tai-shan range, the summits of which rise to about 10,000 feet above the level of the sea. It is the most sacred among the five

* This important place of commerce, which I shall have to mention frequently in the following pages, is noticed in my "letter on Honan and Shansi," p. 20. It is situated in the department of Ching-ting-fu in Chili, and on the western edge of the Great Plain.

sacred mountains of China, and 360 temples are said to be built in its recesses. Most of them are decayed, but some of them are magnificent structures, chiefly the lama-temples. I refrain on this present occasion from any particulars regarding the many points of interest which that mountain-range presents, and the undiscribably arduous pilgrimage made every year by the Mongols to these most sacred temples during the coldest season. From an economical point of view, the fact is noteworthy, that, owing to the presence of the loess, the wild range of the Wu-tai-shan is inhabited to its remotest recesses, and that several villages are built in about 7,500 feet altitude, while the agriculture, as I mentioned in another page, extends to about 8,000 feet. On the southern slope, there are a series of small, but very beautiful and fertile ancient lake-basins, surrounded by loess, bordering on one side on the Wu-tai-shan, and on the other, on rugged hills in which a fair kind of bituminous coal is largely mined. It supplies the southern portion of the basin; while the western and northern districts in it are provided with coal from mines situated near Kwo-hien. The mining-ground of that locality extends towards Ning-wu-fu.

9.—*BASIN OF TAI-YUEN-FU.*

A range of hills, nearly concealed under a thick and broad cover of loess, separates the basin of Hin-chau from that of Tai-yuen-fu. The road which connects them goes over the "Shi-ling" or "Stone-pass," elevated about one thousand feet above the bottom of either. In entering the plain of Tai-yuen-fu, I approached the line of my previous travels in Shansi (1870). I visited on the present occasion the northwestern portion of that plain, which I had not seen then, and will therefore make some additions to my first brief description.

Tai-yuen-fu is a small city, considering that it is the provincial capital. The walls enclose a square of eight by five li, which is not quite occupied by houses, and there are no suburbs. The people are so well behaved, that the foreigner may walk in the streets more freely and unmolested than at Peking. The city is of no commercial importance. It is not very populous, and does not convey the impression of a wealthy place. In ancient times it had a reputation for the manufactury of swords, knives, and various arms. This business has decreased, but gives still occupation to many families, and I was told that even now the government looks upon Tai-yuen-fu as a sort of arsenal. There are also Imperial powder-mills within the city. They exploded recently, but are rebuilt.

The commerce centres in other places in the plain of Tai-yuen-fu. Foremost among them is *Ping-yau-hien*, which is situated on the road from Peking to Shensi, and commands, besides, the road via Tai-yuen-fu to Ta-tung-fu and Mongolia, while the important bridle-path which goes by Tsin-chau and Lu-ngan-fu to Hwai-king-fu in Honan starts from the same place. Some other district-cities, such as *Ki-hien*, *Yü-tsz'-hien*, and the rich town of *Chang-lan-chin*, have appropriated, too, a good portion of the commerce. *Tai-ku-hien* enjoys the reputation of being the seat of the greatest wealth, some of the richest banker families which have their large houses spread through the chief cities in the Empire having here their homes and families. The same city, together with Kiai-hiu-hien and Chang-lan-chin, are to be recommended to the attention of the antiquarian, as in them are said to be the principal magazines of ancient bronzes and other relics of ancient history for which Shansi is famous. Nearly every city, indeed, has its particular branches of business. A great deal of the wealth of the plain of Tai-yuen-fu must be put to the account of the enterprising spirit of the population; for the plain itself, though fertile in many places, and providing with its produce the adjoining hilly districts, contributes nothing to the exports from the province, and must, on the contrary, import wheat and cotton. The best places, as regards agriculture, are situated on the western side of the valley. Near Tai-yuen-hien are some remarkable springs, which issue forth from the hillside as small rivers, and immediately drive a great number of water-mills. They give also rise to the manufacture of paper, which furnishes occupation to many thousands of people. Then the water is used for overflowing a few acres of ricefields, and finally for general irrigation. The most blessed region of all is, the surroundings of Ching-yuen in Yü-kau-hien. Owing to the fact, that a range of hills keeps off the cold northerly winds which sweep over the rest of the plain, it is a garden of many square miles in extent. Besides other kinds of delicious fruit, the best grapes of China are raised there, noteworthy as the only ones of which good wine is successfully made. The discovery is due to the early missionaries, and their successors continue to make the best use of it, employing chiefly the excellent product of their own vineyards. It is said that the Chinese used to make wine in former time—and the statement is corroborated by Marco Polo—but were forbidden further to do so by Imperial decree, because they partook too freely of it. The price of the best grapes in the season of vintage is about one tael for 240 catties.

The basin of Tai-yuen-fu is immersed into the coalbearing strata. Their position is nearly undisturbed. But in consequence of their gentle and broad undulations, the coalseries itself appears only in some places at a level with the plain, and rises in others some hundred feet above it, or disappears below it, leaving its place in one case to the underlying limestone, and in the other to the overlying sandstones. These constitute the hilly region around. Viewed from a distance, the toplines of all the hills unite to a uniform level, so as to indicate the existence of a

plateau, which is the direct continuation of that of southeastern Shansi. It is covered with loess, and cut through by steep gorges, in which the rivers descend. Many of the gorges are cut through the coalformation, and give rise to considerable mining, which is only limited in extent by the demand of the population for coal. Iron ores occur with the coal, and are said to have formerly given origin to an iron industry at Wang-fung-shan, 70 li west of Tai-yuen-fu; but it was not able to compete with other places in Shansi, and the provincial capital is now supplied with iron from Lu-ngan-fu and Ping-ting-chau. Coal is abundant everywhere, and worth, in most places, little more than the cost of transportation. To Tai-yuen-fu, for instance, it is brought a distance of 30 to 40 li. At the mines, 100 cash is paid for loading a two mule cart, which takes about 1,500 catties. The transportation to the city costs one cash a catty. These prices are equal to eight cents a ton at the mine, and one tael a ton at Tai-yuen-fu, the distance of both places from each other being twelve miles. All the coal occurring in the vicinity is bituminous coal, of good quality, and, most of it, of a fair degree of solidity. The coalbeds are numerous. Those which are worked are generally from three to five feet thick, but attain in some instances eight, and even ten feet. Their horizontal position, and the fact that their outcroppings are exposed to view on hillsides, render mining extraordinarily easy. Besides, most of the coalseams are overlain by hard sandstone, which forms a solid roof in the mines. It needs to be supported only by coalpillars, and reduces the expense for timbering to a mininum.

It is needless to enter into any more detail where both abundance of material and ease of extraction are so clearly demonstrated by the price at which coal is sold.

10.—*FROM THE BASIN OF TAI-YUEN-FU TO THAT OF PING-YANG-FU.*

I left the plain of Tai-yuen-fu at Ling-shi-hien. There I came into the great highroad which leads from Peking to Si-ngan-fu. I went then, for a short distance, from Ling-shi-hien to Ho-chau, over a portion of the road which I had seen on my journey in 1870. From Ho-chau to Ping-yang-fu I followed, on the present occasion, the highroad, while I had formerly visit d, on byways, some coalregions lying west of it. I have therefore to make some additions to my former description. The formations which take part in the composition of the surface are, as I then remarked, very few. West of the Ho-shan range, loess spreads over everything, and underneath it, every ravine discloses either the coalmeasures, or the strata which enclose it below or above. Mining is done in numerous nooks and hollows. The loess gives origin to some of the most difficult passages of the great western road. Among them, the Han-sin-ling pass is reputed throughout China, partly on account of the inconveniences remembered by the travellers who went over it, and partly on account of the important part it has played in Chinese history.

On the Han-sin-ling pass commences a warmer climate. Wheatfields cover the loess up to great altitude above the valleys; the season is earlier than near Tai-yuen-fu, and allows more generally the raising of a second crop; the poppy is no longer restricted to the most favoured localities. The best evidence of the change of climate is given by the large traffic going from south to north, and in particular, from the valley of Ping-yang-fu to that of Tai-yuen-fu. Wheat was most conspicuous among the articles making up that traffic. I met in the space of an hour and a half 520 donkeys loaden with wheat and wheatflower, and I passed their file at the same rate during the whole day of fifteen working hours. According to these figures, 200 tons of wheat and flour would cross the Han-sin-ling pass in one day, in that season (end of December). It came from southern Shansi and went to Ping-yau-hien. Tobacco accupies nearly as conspicuous a place. I met a train of 95 camels, which carried about 300 piculs of it, and estimated this at about one-fifth of all the tobacco which passed me on the same day, on carts, donkeys, and camels. It came from Kiu-wu-hien, 30 miles south of Ping-yang-fu. Most of it was destined for Ping-yau-hien, but some was to go directly through to Kwei-hwa-ching. The rest of the great traffic is made up by cotton, from Ping-yang-fu, Shensi, and Honan; salt from Kiai-chau; tea from Han-kau; paper from Ping-yang-fu; potass from Wan-hi-hien (Kiang-chau), Chilipepper, and an astonishing quantity of glue from Han-chung-fu in Shensi. I note these particulars, because the Han-sin-ling is one of those places where the entire traffic between two large regions is narrowed down to one single channel. But while the goods going from south to north in one day are sufficient to occupy a large railroad train, the animals return empty in going south. Carts only are loaded. They carry, however, no northern goods, but foreign imports and southern produce which came via Tientsin and Hwo-lu-hien. Foreign piecegoods occupy here a conspicuous place.

Hung-tung-hien, which is situated at the head of the valley of Ping-yang-fu, is a small but lively place, owing to the fact, that most of the goods are there transhipped. It is the northern terminus of convenient cartroads. Thousands of donkeys are ready every day to transport the goods over the difficult loess-passes between Hung-tung and the plain of Tai-yuen-fu. The country is very fertile. Irrigable ground is sold at Tls. 45 per mow, the dryest loess-ground at Tls. 3. A small area is planted with rice. Wheat, kaoliang, two kinds of millet, cotton, beans, peas, tobacco, poppy, hemp, are the bulk of the produce. Native cotton was worth, at the time

of my visit, 360 cash a catty (one tael was 1,950 cash), that from Honan 320 cash, the latter being considered inferior to that of Shensi. Native tobacco was 5,000 cash per picul, wheat about Tl. 1 per picul.

Ping-yang-fu, which I had not entered at the time of my last visit, is completely destroyed. The story is told that, several years ago, a band of rebels, coming from Honan, entered the city quite unexpectedly, but left again after a slight pillage. When they were at some distance, the mandarins, in order to give some substance to their projected report to the Emperor of having saved the city by martial defence, ordered some shots to be fired after them from the walls. The rebels, considering this an ungrateful treatment, turned back, and destroyed the whole city, killing a great many people. Since that time, soldiers are stationed among the ruins.

11.—*BASIN OF KIAI-CHAU.*

A ridge of loess, similar in character to that of the Han-sin-ling, but not so high, shuts up the basin of Ping-yang-fu to the south, and separates it from the *valley of Kiang-chau*, in which much tobacco is raised. Its surroundings, to the east, north, and west are as full of coal as those of the other valleys to the north. Anthracite is mined to the east, and bituminous coal to the west. The Fuen-ho takes here a sudden turn to the west. Near the place where it empties into the Hwangho lies the district city of Ho-tsin-hien. The rich coalmines near it provide the southernmost regions of Shansi and a considerable portion of Shensi.

Together with the valley of Kiang-chau and the basin of the Fuen-river, we leave the coalregions of Shansi. The most conspicuous feature of the remaining southwestern portion of the province is the granite range of the *Fung-tiao-shan*. It commences abruptly between Pu-chau-fu and Tung-kwan, and has an eastnortheasterly direction, rising rapidly to 3,000 and, farther on, to about 5,000 feet above the Yellow River. Its northern slope is a straight wall, which rises immediately to the highest summits, while on the south it is covered with loess, which extends in a continuous sheet across the Yellow River. The Fung-tiao-shan is joined on its northern foot by a long depression, which is situated probably more than 120 feet below the level of the Yellow River, although separated from it by no more than forty miles of level ground. It contains the saltmarsh of Kiai-chau. The vicinity is a highly interesting region, and affords one of the nicest subjects for the minute study of those lake-deposits which took place in basins of loess, and simultaneously with its formation.

12.—*SALTMARSH OF LU-TSWUN IN KIAI-CHAU.*

The saltworks of southern Shansi deserve attention, not only because they are the greatest in China, but also because they supply, probably, in a normal state of affairs, a greater number of individuals than any other existing saltworks. Besides, it is safe to assume, that their supply has been continuous, at least since the first commencement of Chinese history, and it is not a daring supposition, that their exploitation antidates considerably the time of Yau, who is supposed to have reigned 5,000 years ago. If any distinct locality, in China, recommends itself for researches on pre-historic man, it is the basin of Kiai-chau.

The region from which the salt comes into commerce is popularly known by the name of "*Lu-tswun.*" This is properly the name of the northern suburb of a large walled town *Yuen-ching*, which, notwithstanding its fine walls and rich appearance, is neither a *fu*, nor a *hien*, nor even a *chin*. It is the residence of a Tautai, who manages the salt monopoly. The sales of salt are made at Ngan-i-hien, Yuen-ching, and Kiai-chau. all of which are very lively, populous and wealthy places, but the name of Lu-tswun has attained a much more widespread popularity than any of the others.

Yuen-ching is situated on nearly level ground made up of regenerated loess, and so full of alkaline salts which effloresce on the surface, that drink-water must be carried to the place from a great distance. Going one mile south, a curious spectacle presents itself. In a long and straight line, stretching away as far as the eye can reach, the level ground is broken off, and slopes down, in terraces, to a basin 300 feet below, and beyond this rises the majestic wall of the rugged Fung-tiao-shan. The basin, known by the name of "Yen-tsz'" or "Salt-marsh," is sixty *li* long, and ten *li* wide. The ground slopes slightly down to the foot of the mountains, and along this extends a narrow sheet of water through the whole length of the basin. This lake has no affluents, the natural drainage beyond the northern rim of the basin being directed away from it, while the summit-range of the Fung-tiao-shan is unbroken by any watercourse. Only the rain which falls on the area of the basin collects in the lake, and the level of this is subjected to little change. No use is made of the lake-water, which is but slightly saline. The marsh, which bounds its northern shore and occupies at least two-thirds of the basin, yields all the salt made in the place. It is said to resemble a beehive, from spring to autumn. When I visited the place, at the end of December, the workmen were busy with preparatory labours.

The ground is divided between 150 corporations, each of which owns a strip of land which extends square across the marsh and lake, and is about 600 feet wide. At the upper end of each strip, on the terraced slope, stand the substantial dwelling houses of the proprietors. The labour is simple. In winter, a funnelshaped hole is dug in the ground, 20 feet deep, and from 50 to 60 feet wide on the top. The ground is a stiff blue clay, full of small crystals of gypsum. The consistency is favourable for terracing the sides of the hole and giving it some solidity. A concentrated brine collects in the bottom. By the same primitive means of swinging buckets, which are often seen applied in Chinese ricefields, the brine is lifted from step to step, to the top, and then led, through channels, to level squares encased with mud, where it is evaporated by the sun. Every year the hole is made in another place. The deepest holes are in the eastern portion of the basin, where the brine is reached at forty feet below the surface. To make pits, or examine the ground at great depth, by boreholes, has never been attempted. The prospect of finding a body of rocksalt would appear exceedingly favourable.

Each corporation produces yearly between 20 and 80 *ming* of salt, of 300 piculs each. If 50 *ming* is taken as the average, the yearly production would be 7,500 *ming*, or 2,250,000 piculs.* The first selling price is Tls. 350 per *ming*. The proprietor, before selling at this fixed price, has to pay duties to the amount of Tls. 160 per *ming;* besides, the purchaser is subjected to other duties, amounting to Tls. 60. The price of Tls. 350 is equal to about 20 cash a catty. The retail price in the neighbourhood is 30 cash, and it increases with the distance from the place of production. Wages at the saltworks are 90 cash and board.

These saltworks supply Shansi, northern Shensi, and the greater portions of Kansu and Honan. The amount of yearly extraction (supposing the figure arrived at to be correct) would hardly appear to be sufficient for the population of those regions. But there are some other sources of supply. In the valleys of Hin-chau, Tai-yuen-fu, Ping-yang-fu, Si-ngan-fu, in fact in every large loess-basin, salt is made. It is of very inferior quality, has a brown colour and a bitter taste. It is sold at a price ranging from 7 to 20 cash a catty, and only used by the poor. Some restrictions put upon its sale by the government are mentioned in my letter on Honan and Shansi. A portion of Shansi is also provided with salt from Tientsin.

13.—*FROM KIAI-CHAU TO TUNG-KWAN ON THE YELLOW RIVER.*

The city of Kiai-chau is situated at the western end of the salt-basin, and near the northern foot of the Fung-tiao-shan. West of it, a continuous orchard, thirty miles long, and from two to three miles wide, joins the descent of that mountainrange. Apples, pears, plums, persimmon, jujube are the principal fruit raised. Many villages are scattered between the trees. To the north extends a plain with some low ridges of loess. Westward, this plain is separated by a spit of loess from the narrow strip of level ground on which stands the city of Pu-chau-fu. And here we reach the Yellow River, just where it takes a long sweep to the west, preparatory to its great and sudden bend to the east. The concave bank, next to the river, is a broken edge of regenerated loess, commencing at a level with the Wei-River and ascending almost imperceptibly, but steadily, as the eye follows it northward along the Hwang-ho. On the convex side of the bend extends alluvial land, sandy and impregnated with salts near the river, but fertile at a little distance from it. A few miles below Pu-chau-fu, on the left bank of the Yellow River, stands the fortress of Tai-chin-kwan, in and around which thirty batallions of soldiers were stationed, to protect the passage over the Hwang-ho, which leads to Tung-chau-fu in Shensi. Twenty-five miles below Pu-chau-fu is the celebrated passage of the fortress of Tung-kwan, where the boundaries of Honan, Shansi and Shensi meet. I crossed the Hwang-ho at that place. The river was covered with floating ice, and the passage disagreable. The current was swift, the river shallow, the water muddy, of loess-colour. I estimated the width of the stream at, at least, 600 yards. I will describe the Tung-kwan gate in connection with the province of Shensi, but, before proceeding to this, add a few general notes regarding the province which we leave.

14.—*GENERAL REVIEW OF THE PROVINCE OF SHANSI.*

Configuration of surface.—In my first letter on Shansi, I have given a description of the configuration of the southern half of the province. It is, form a geological point of view, a plateau elevated from 5,000 to 6,000 feet above the level of the sea, made up of the horizontal strata of postcarboniferous sandstones, and surrounding the Ho-shan range, which rises to about 8,000 feet. But the character of the plateau, as a continuons tableland, is effaced by the action of the water, which has eroded in it deep channels and basins, down to the coalmeasures and the limestone, which underlie, in succession, the sandstone, at altitudes varying from 2,500 to 3,500 feet. To the south and east, the sandstone of the tableland is cut off completely, and makes room for the lower plateau which skirts the foot of the other, and consists of the limestone floor, and the coalmeasures resting on it.

* For the sake of comparison, it may be mentioned that Stassfurt and Wieliczka produce only about one-third of that quantity each. But it is hardly fair to compare the results of mines of rocksalt with those obtained from evaporating brine at the open air.

Here is the seat of the coal and iron industry of Tse-chau-fu, Lu-ngan-fu and Ping-ting-chau. The limestone constitutes the ragged descent from this lower tableland to the Great Plain, giving it, from below, the appearance of a mountainrange, which is known as the "Si-shan" or "Tai-hang-shan." It also reappears at the bottom of small but deep riverchannels, as well as of large eroded valleys of the interior, such as the basins of Tai-yuen-fu, Ping-yang-fu, Kiang-chau, and renders here, too, the coalbearing strata easily accessible. These yield anthracite east of the Ho-shanrange and its imaginary continuations north and south, and bituminous coal to the west of it.

This configuration continues west, across the three large basins and, probably, across the Yellow River, to Shensi. It continues also northwest of Tai-yuen-fu, and north, to the basin of Hin-chau, where the limestone floor rises to a higher level. The coalfields of Wu-tai-hien, Kwo-hien and Ning-wu-fu appear to be the last, in a northerly direction, which belong to this grand, little interrupted, and little disturbed expanse of highly productive coalformation, although it is possible that they are connected in the west with the coalfield of Ta-tung-fu.

East and north of the last mentioned places, this simple configuration ceases. We meet in northern Shansi with high mountainranges trending southwest and northeast, and made up of very ancient formations whose relative age is apparent from the fact, that Silurian beds rest horizontally on their highly disturbed strata. In the central line of Shansi, these mountainranges enclose between them wide depressions, but to the east they range closer, and give rise to an apparently complicated and certainly extremely wild country, which constitutes the descent from northern Shansi to the plain of Peking. To the west, too, there is a high mountainous country, which renders the approaches to the Yellow River difficult.

We have then, if we overlook the whole province, to the east, a very steep descent to the Great Plain, known as the Tai-hang-shan, while to the northeast the regions on the San-kang-ho merge into those of the department of Siuen-hwa-fu. Next to this descent follows a high mountainous country, in the southern half of which there is extensive coalmining, while the northern half consists chiefly of rocks preceding the coalformation in age. We arrive now at the central line of the province, along which, from north to south, there is arranged a curious series of deep depressions, all of them ancient lakebasins, immersed in loess, and filled with stratified soil, the surface of which is in each case a more or less extensive plain. This is the agricultural belt of Shansi. Yet, every basin, within the province, has also its large share of coal-bearing ground. The altitude of the basins diminishes as we proceed from north to south. The following figures are rough approximations to their elevations above the level of the sea, and only given to convey their order of gradual descent.

1st.—Basin of Tung-ching (beyond the Great Wall) 4,500 to 5,000 feet.
2nd.—Basin of Ta-tung-fu, 4,000 feet.
3rd.—Basin of Tai-chau and Hin-chau, 3,500 feet in its northern, 3,000 in its southern portion.
4th.—Basin of Tai-yuen-fu, 3,000 feet.
5th.—Basin of Ping-yang-fu, 1,800 feet.
6th.—Basin of Kiang-chau, 1,500 feet.
7th.—Basin of Kiai-chau, 1,200 feet.

This series of basins indicates, however, by no means a chain of lakes that were formerly connected with each other. Some of them are separated from those next adjoining by high dividing ridges, and they are drained by different rivers, and in different directions: the first and second by the San-kang-ho and its affluents, towards the plain of Peking; the third by the Pu-to-ho, which descends eastward towards the Great Plain and reaches it near Ching-ting-fu; the fourth, fifth and sixth are all situated on the Fuen-ho, an affluent of the Yellow River, but separated from each other by ridges consisting, in one case of limestone and loess, in the other of loess alone. The seventh is drained directly to the Yellow River, near the Tung-kwan.

West of the agricultural belt follows again a mountainous country, in which the coal-formation is a conspicuous feature everywhere. Judging from the mode of its position on the western edge of the basins, it appears to be little disturbed, and it is probable that, together with the strata enclosing it below and above, it crosses the Hwang-ho as a continuous sheet, eroded to a great extent, but seldom interrupted by other rocks, and that the underlying limestone gives origin to the wild gorges through which the river flows.

Roads.—One great cartroad leads through the province from north to south, and connects all the basins with each other. In every one of these, it spreads out into many channels, connecting all the cities and villages within it, and converging again into one road on the dividing ridges. From the east, two cartroads join this main trunk, one from Siuen-hwa-fu, which enters the plain of Ta-tung-fu, the other from Ching-ting-fu. The latter is the most important. To the west there is no outlet for carts, and to the south only one, at the great bend of the Yellow River. Apart from these roads, the province can be entered from east and south by several bridlepaths, some of which are used for a considerable local traffic. Only two are of importance for a more general trade. One of them follows the Puto-ho, from Hwo-lu-hien in Chili to Hin-chau. It is used for the traffic to the north, and many goods destined for Tai-yuen-fu go by it, to avoid the

duties which must be paid on the main road. The other bridlepath, from Hwai-king-fu in Honan, by way of Tse-chau-fu, Lu-ngan-fu and Tsin-chau, to Ping-yau-hien in the plain of Tai-yuen-fu, was mentioned in my first letter on Shansi (p. 13).

Passages of the Hwang-ho.—The Yellow River, where it forms the western boundary of Shansi, is not only unfit for navigation, excepting in portions of its course, and then only for small boats, but also difficult of access, and difficult to cross. Its inaccessibility, in the greater portion of its course, is demonstrated by the fact, that, although the river is frozen in winter, a few detachments of Imperial soldiers, stationed at the customary places of passage, were sufficient to prevent the Mahomedan rebels from invading the province of Shansi. North of the Tung-kwan bend, no important road of commerce goes across the river from east to west, although a small trade was always entertained in several places, and, in diminishing proportions, is still carried on after the devastation of Shensi. *Pau-te-chau* is the most important among them. I have mentioned in another chapter, that only a mountainous bridlepath leads to that place from the east. The passage will always retain some importance, as establishing the connection of Hwolu-hien with Yu-lin-fu in Shensi and the Ordos country. Higher up the river, *Toto* must be mentioned, the place of passage between Kwei-hwa-ching and the Ordos country. Both places are well known from the descriptions by Gerbillon, who crossed the Yellow River when accompanying the Emperor Kang-hi. Below Pau-te-chau, there are five or six unimportant places of passage, till we reach *Ki-chau*, a country which abounds in coal. At that place, the rebels succeeded once in crossing the river on the ice, and a strong garrison is stationed there since. The river is smooth at Ki-chau, and then enters the narrows which end at the Lung-men. Thence to Tung-kwan it is navigable. At the great bend there are, as I have mentioned, two crossings: that of *Tai-chin-kwan*, near Pu-chau-fu, which establishes the connection with Tung-chau-fu and the regions north of the Wei-River; the other is the passage of Tung-kwan, by which the main traffic between Shansi and Honan, and between Shansi and Si-ngan-fu takes place.

Products and population.—Shansi yields nothing for exportation but coal, iron, and salt. Its chief imports are cotton, cotton-goods, wheat, and opium. It produces these articles in a quality superior to that of the neighbouring provinces, but not in sufficient quantity for its own consumption. The altitude of its arable ground renders nearly the whole of it unfit for raising two crops a year. It is a current opinion in Shansi, that the imports exceed considerably the exports in value. I have stated this fact in particular in relation to the basins of Hin-chau and Tai-yuen-fu. It is also true of that of Ping-yang-fu. This valley exports a great deal of wheat and cotton to the north and east, but makes up the amount by, probably, larger imports of those articles from the south, and the gain it derives from the sale of tobacco, paper, and a few other abundant products is counterbalanced by the consumption of opium in excess of that raised in the valley itself, and the importation of foreign and southern produce. Yet, Shansi is considered a wealthy province, and there is probably no other region of equal extent in China where the small towns and villages consist of so substantially built and expensive houses as is the case in the plains of Tai-yuen-fu and Hin-chau. The capital with which their two and three-storied brick-buildings are constructed is, as I have repeatedly hinted at in the foregoing pages, the enterprising commercial spirit of the population; and it may indeed be said, that mental labour is the chief article of export from Shansi. Hundreds of thousands of the young men of the province work as clerks and book-keepers in the cities of Chili and Manchuria, leaving their families home. They return on leave every five or ten years, bringing with them their earnings. The remunerative commerce beyond the Great Wall, from Manchuria in the east to Ili in the west, appears to be almost exclusively in the hands of the Shansi men. And it is known, that they manage the banking business throughout the Empire. With the exception of banking, they cannot rival in the south with the men from Kiangsi in doing general commerce. These boast that they owe their success to cunning and skill in deceit, and blame the Shansi men for being too upright in their dealings. But to form a correct opinion of the commercial-spirit of the latter, the Mongols should be consulted, who would hardly give them so flattering a testimony.

Unpleasant experiences with the population are rare in travelling through Shansi. They are too intelligent, and too much of a matter-of-fact people as to form their opinion exclusively from vague rumours. I believed to notice a marked improvement in the spirit of the population towards foreigners, as compared with the experience on my previous journey, due, partly, to the logical conclusion (which few other Chinamen are able to draw), that people who supply them with so many useful articles of curious make and high finish cannot be altogether inferior to them, and partly, to the increased intercourse of Shansi merchants with foreigners, in Tientsin. Their favourable impressions, related in the roadside inns, spread rapidly.*

* Nothing has worked so forcibly in the interior of China to bring foreigners into general contempt, and nothing contributes so much to the insults to which the traveller is occasionally exposed, as the importation of stereoscopic pictures of a certain most vulgar class; and foreigners in China have no greater ennemies than those who have introduced them. They are exhibited by itinerant showmen, who travel with a stereoscopic apparatus. From the gates of Peking to the places before the temples at Si-ngan-fu, and to the remotest towns and villages, chiefly as far as the influence of Tientsin extends, I found them everywhere. Where that is the only source from which the natives are enabled to form their opinion of foreigners, how can it result in anything but the most profound contempt! Nothing but personal intercourse can wipe out these impressions.

NORTHERN SHENSI.

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1.—*GEOGRAPHICAL BIPARTITION OF THE PROVINCE OF SHENSI.*

Shensi consists of two regions differing from each other in many essential respects. Two thirds of its area, lying north of the Tsing-ling-shan* range, belong to the basin of the Hwang-ho; the remaining one third is situated south of that range, and constitutes the upper half of the basin of the Han River, an affluent of the Yangtse. The watershed which, in the main, coincides with the highest summit-line of that range, is also a divide as regards the nature of the ground: it separates sharply the loess-region of the north from another to the south in which no loess occurs. The former resembles in every respect the northern provinces in general, while the basin of the Han differs much from them in character, and is closely allied to Sz'chwan. The difficulty of communication between the two portions of the province is so great, that either of them has played its independent part in the history of China. As regards recent events, the Taiping rebellion extended to the upper Han, and the rebels had possession of its valley during several years; but on two occasions only were raids by small roving bands made into northern Shensi. The Mahomedan rebellion, on the contrary, had its foothold in the north, and never spread south of the Tsing-ling-shan. As regards products and commercial intercourse, and in fact all practical questions, the two regions are just as strongly divided. It is therefore necessary to treat of each of them separately.

Northern Shensi comprised in former time all the territory situated between the north and south reach of the Hwang-ho to the east, the Great Wall to the north, and a line of high mountain-ranges to the south-west. When the Chinese Government deemed it necessary, and succeeded, to push the dominion of China proper beyond the Kia-yü-kwan gate in the Great Wall, and to annex that long and narrow strip of country which extends from there through the Gobi desert to the northern foot of the Tien-shan range, another province was created, by the name of "Kansu," and a completely arbitrary line drawn between it and that country which was left to "Shensi." At present, northern Shensi consists of the lower portion of the basin of the Wei River, and of the basins of a few other small affluents of the Hwang-ho. All historical, political, strategical, commercial, and social interests of northern Shensi centre in a large loess-basin, through which lies the lower course of the Wei River. It formed also for me the basis from which I drew my information regarding, not only the regions farther north, but also the province of Kansu. I will describe it in the following pages by the name of the "Wei Basin," and then dwell more particularly upon Si-ngan-fu, the great capital of the north-west of China. As regards the present political troubles of the country, their origin and history, I beg to refer to a letter on that subject which I addressed to your Secretary from Si-ngan-fu.

2.—*THE WEI BASIN.*

Formation of Surface.

The Wei-ho is the greatest affluent of the Hwang-ho. In its lower course, it is a broad but shallow river, nagivable for very small boats from its mouth to Han-yang-hien. This is the name of a lively commercial place situated 14 miles west of Si-ngan-fu, and 140 miles, in an air line, from the mouth of the river. The Wei River is accompanied on its southern side, at the distance of from one to sixteen miles, by the steep descent of high mountain ranges. In some places it is separated from the rocky precipices only by a low and level terrace made up of strata of regenerated loess, and impregnated with alkaline salts; in others, true loess occupies the intermediate space, and covers the slopes to great altitude. North of the

* On foreign maps, the name "Tsing-ling" is used for this range. But it denotes only one of the passes by which it is crossed. The popular name for it throughout the surrounding country is "Tsing-ling-shan," besides the constantly recurring one of "Nan-shan." On many maps, the name of "Pe-ling" is still applied for the aggregate of all the ranges dividing the Yellow River from the Han. This name is of foreign invention, and should be completely dropped.

river, the ground rises at an extremely low angle, so slowly indeed that it has almost the appearance of being level, and must, in common language, be called a plain. As far as the eye can reach in that direction, it sees the vast extent of this gradually rising ground. All this is loess. In the distance, the uniformity of the surface is occasionally interrupted by slight swellings. They mark the position of ranges of hills covered with loess, and exposing their rocks only in gullies, and are the southern ends of long hilly spurs projecting from the higher, but (according to native statements) still loess-covered, ranges beyond. Going west, some of these spurs approach nearer to the Wei River, and finally, on the western boundary of the province, they almost join the Tsing-ling-shan. The slightly rising ground extends between the spurs far to the north-west, on both sides of every river. On the smaller rivers there is probably no alluvial soil at all, and the Wei River is accompanied by it in a few places only.

We are here, indeed, in the very centre of the loess region. As far as I have travelled in the Wei Basin, I have seen little else but loess; and it is evident from the description given to me of various portions of the province, that the whole of it, north of the Tsing-ling-shan ranges, is covered by an almost continuous sheet of loess of great thickness. Everything is yellow. The hills, the roads, the fields, the water of rivers and brooks are yellow, the houses are made of the yellow earth, the vegetation is covered with yellow dust, and whatever moves on the road shares, for the same reason, the general yellow colour; even the atmosphere is seldom free from a yellow haze, which is due to the diffusion through it of fine dust of loess. It is here where, if I am correctly informed, the word "hwang" (yellow) was first used as the symbol of the earth, and one of the most ancient of the Chinese Emperors adopted the title "Hwang-ti," that is "Lord of the Earth," or, as we may more fitly translate it, "Lord of the Loess." The word could never have originated in any of the southern provinces.

If the Wei Basin were more extensively examined, it would probably be found to exhibit all the features peculiar to loess-basins on the grandest scale and with the most perfect development, because no other loess-basin is so extensive, and no one appears to extend through equally wide ranges of altitude. In its lowest portions even, where it has the appearance of a plain, it is not lacking of those characteristics. All the rivers coming from the north, together with their tributaries, descend in channels, the vertical or terraced walls of which increase in height with the distance from the Wei River; and if they were followed higher up, they would be found ramifying into the loess in an infinite number of the wildest gullies. This merely theoretical supposition is fully confirmed by the description of the scenery near the headwaters of various rivers, as given by Gerbillon, native travellers, and the Emperor Kang-hi himself.

West of the head of navigation, the peculiar character of the loess is conspicuous in the immediate vicinity of the Wei River. The bottom of the loess-basin rises in that direction more rapidly than the bed of the river. Consequently, we see the latter flow in a channel immersed in the loess, and increasing in depth as we ascend the river. Below Pao-ki-hien the channel is 600 feet deep. Its northern bank rises from the strip of alluvial ground which accompanies the river, in a series of narrow terraces, the aggregate of which form a slope of from 35 to 50 degrees. Notwithstanding this steep inclination, every terrace is not only cultivated, but most of them are inhabited. The backwall is perforated with caves in which the people live, and long flights of steps excavated in the loess connect with each other the cave-villages situated at different levels. At a level with the top of the highest terrace extends the plain of Fung-tsiang-fu, with a continuous rise towards that city and beyond it, and cut by gullies which are extremely steep and narrow, but wide apart. West of Pao-ki-hien the even ground of the loess basin contracts, but then expands again, in the large basin of Tsin-chau, in Kansu, which is said by native travellers to exhibit the erosions on a much larger scale than the lower Wei Basin. Beyond it, the sources of the Wei River are soon approached. They are situated in the coal-region of Kung-chang-fu.

Geographical Situation.

The Wei Basin is the greatest agricultural country of the north-west. To this circumstance, next to its geographical position, it owes the prominent part which it has played in the history of China, and chiefly in its early epochs. Immediately on entering the Wei Basin from the east, the impression of its peculiar position is vividly conveyed. In the provinces of Honan, Chili, and Shantung, the interests and relations tending in the direction of the seaports and the marts on the lower Yangtse are largely prevailing. In vain

the traveller attempts to get any but the most superficial information as regards the regions to the far west. In Siuen-hwa-fu and northern Shansi, his looks, following the lines of practical interest, are directed towards Mongolia, while on the Han river they are turned to central China. On the Wei River, he finds himself suddenly arrived at a point of view from which he believes to see spread out before him, like a map, an immense portion of Central Asia, with its roads of commerce to Turkestan and Ili, its peculiar and quite exceptional political conditions, and its turbulent history, marked by the periodical fluctuation and displacement of nationalities, and spasmodic events, many of which resulted in an unparalleled destruction of human life. Most of these gigantic movements reacted powerfully upon the region of which the Wei basin forms the central and most important portion, and some of them actually extended with all their terrors till the Tung-kwan gate; just as the last of these movements, that one enacted within the last decade, commenced near the Tung-kwan gate, and immediately spread to regions far west, while the east and south of China were never drawn into its sphere. It is on account of these intimate relations with the north-west, that from the Wei River, as a point of view, the phases of ancient Chinese history, the chief theatre of which was the Wei Basin itself, together with its eastern extension, the region of Kiai-chau and Ping-yang-fu, pass before our vision like a natural corollary to the geographical relations. We find in these the clue to the course of Chinese politics towards the west, to the fluctuations of their power in that direction, and they are suggestive of the course events may take in the future. A short survey of the geography of the surrounding regions will elucidate these remarks.

To the south, the Wei Basin is shut up precipitously by a barrier of mountains whose summits rise to from 5,000 to about 11,000 feet above the level of the sea. It consists of two parallel ranges, the *Fu-niu-shan* and the *Tsing-ling-shan*. I crossed the former, on a previous occasion, near its eastern end, in the Nan-chau passage*; its western terminus is at Lin-tung-hien, a few miles east of Si-ngan-fu, renowned as the burying place of the great Emperor Tsin-chi-hwang. It is joined on the northeast by the sacred *Hwa-shan* range. From Si-ngan-fu westward, the Tsing-ling-shan forms the southern boundary of the Wei Basin. It continues farther west into the unexplored mountainous region of Kokonor, and constitutes, with it, the easternmost outlier of that broad and almost unknown complex of very elevated mountain ranges which the Chinese designate, still farther west, with the name of the *Kwen-lun*. This outlier projects into China proper like a gigantic wedge, dividing north and south—Loess-China from the regions without loess. At Si-ngan-fu, the width of the wedge is already much reduced, as compared with regions farther west. Yet it is even here a formidable barrier. After having, for ages, impeded any but the most distant relations between the Wei Basin and the regions south of it, a connection with these was established about sixteen hundred years ago, by the construction of an artificial road across the Tsing-ling mountains to Han-chung-fu, which is to this day the only practicable route of travel and commerce between the north of China and the province of Sz'chwan. To the southeast, however, a natural road opens between the Funiu and Tsing-ling ranges to a navigable affluent of the Han River, the Tan-ho, which intersects the last-named range and empties into the Han at Lao-ho-kou. This passage is of great importance for the Wei Basin. It establishes an easy connection with a portion of Honan, and the provinces of Hupè, Hunan, Nganhwei, Kiangsu—in fact, the whole south-east of China.

The Wei Basin is nearly as effectually closed to the east. Here, the elevated table-land of Shansi, with its partial but almost unknown continuations into Shensi, connects the highlands of Mongolia with the mountainous regions of Honan. From Toto, in the neighbourhood of Kwei-hwa-ching, where the Yellow River, coming from the west, first approaches this elevated country, it seeks in vain for a place of egress to the east, until it finds it about six degrees of latitude farther south, at the Tung-kwan gate, which is, at the same time, the lowest place of the Wei basin. I have mentioned in another page, that no one great road of commerce leads across the river from west to east, for this whole distance. Like the river itself, the great commercial intercourse is restricted to the Tung-kwan gate, through which the connection is established with Shansi, Honan, Chili, and Shantung.

While to the south, high mountains, and to the east, a river flowing in rocky gorges and (probably) between deeply cut table-lands, form nearly impassable barriers, but still allow a passage on three quite distinct roads, the barrier which shuts in the Wei Basin on the north appears to be even more formidable, though it is much less conspicuous and differs totally in character from the others. According to the information

* Letter on Honan and Shansi, p. 4.

which I was able to gather, it is the loess, the *huang-tu*, which causes there the difficulties, together with the situation, beyond it, of the inhospitable region of the Ordos Mongols, which fills out the great curve of the Yellow River. The *Ordos country*, as far as I am able to conclude from various information, has an elevated southern rim, which is approximately indicated by the line of the Great Wall, and divides the headwaters of several affluents of the Yellow River from a plateau without outward drainage covered with pasture. Those rivers, which descend towards the south, east, and west, have their origin in a great number of deep gullies, cut precipitously into loess. On the plateau, the water collects in inland basins, just as in Mongolia, and the growth of the loess is probably proceeding in them. The plateau diminishes in altitude towards the north. It terminates in this direction, as in all others, with the setting in of the outward drainage, and a belt of loess furrowed by gullies divides it from a low and undulating sandy region, which fills the innermost portion of the curve; it owes its existence probably to the action of the river, which has, since ages, worked on the destruction of the material along the outer curve of the great bend, and redeposited some of it on the opposite side. The river is, in those regions, a broad net of shallow channels, meandering between sand dunes, and it is asserted that, in one place, no river at all exists for many miles, the whole body of the water being sucked up by the sand.

Uninviting as those regions are by themselves, the approach to them from the south would be attended with the greatest difficulty. A glance at the distribution of the watercourses in Shensi, combined with the information, that all of them are cut in loess, or in mountains and tablelands covered with loess, must convince anyone acquainted with the nature of that formation, that traffic, north of Fu-chau, which appears to be the northern limit of the gentle surface of the Wei Basin, must be attended with great inconveniences. There are roads to Ya-ngan-fu and Yu-lin-fu, which is the place of supply and commerce for the Ordos Mongols, but they serve only for local trade. Difficulties of intercourse, and the absence of any important region of supply, co-operate to isolate the Wei Basin in that direction. The two greatest marts north of Shensi are Kwei-hwa-ching and Ning-hia-fu. Communication with the first takes place through the Tung-kwan gate and Shansi, with the other through Lan-chau-fu in Kansu.

It is towards the north-west, along the foot of the outliers of the Kwen-lun, that the chief interests and commercial relations are directed. I have called the boundary between Shensi and Kansu an arbitrary line. It appears that, if it followed the watershed of the Wei river and its affluents, it would still divide two regions closely allied to each other, as regards climate, nature of the soil, and scenery. Kansu is situated at a greater elevation, and has a much colder climate, than the Wei Basin. But this circumstance tends to make the tie between both closer, because Kansu must rely upon the Wei Basin as a basis of supply, for some essential products in which it is deficient. I will give, in another chapter, a few details regarding this subject and the prevailing tendency of traffic through Kansu to the far north-west.

POPULATION.

The Mahomedan rebellion has reduced northern Shensi so considerably, that it would not be doing justice to that country if one were to form an opinion in regard to it solely from its present state. Evidently, the Mahomedans have had the firm purpose to exterminate the entire pagan population and the destructible portion of their property. They made a wholesale slaughter of men, women and children, and destroyed villages and cities. Where mountains were in the neighbourhood, the inhabitants fled to them, if they were able to do so. But the movements of the rebels, who were on horseback, were so rapid and unexpected, that the proportion of those who were able to take refuge was small. The destruction was greatest in the central portion of the Wei Basin, on account of the great distance of the hills. Solid city-walls proved an efficient barrier, because the rebels had no artillery. Si-ngan-fu, Tung-chau-fu, and most of the *fu* cities, together with some *hiens* were saved. But a great many are destroyed. On the road from Tungkwan to Si-ngan-fu, every city has had that fate. In the villages not a house was left standing, those of the Christians excepted. The villages in the Wei basin were large and numerous; not one of them has escaped destruction. The temples in particular were most savagely dealt with. Even the caves in the loess were not spared, and their brick-fronts torn down. The destruction of life counts by millions.

Yet, Shensi is recovering from the blow. In the space of two years, which have elapsed since the Mahomedans left, the survivors have rebuilt their houses, and new cities are forming. It is a curious fact, that public buildings only are again erected within the old city walls. The people dislike the restriction put

upon them by the closing of the gates, and are building their new cities outside of these. They may also have learned by experience that, if the fortification is not strong and the gates are in possession of the enemy, the walls, far from being a protection, are an impediment to flight, and may, on the contrary, be the first cause, that no inhabitant can escape being killed. Immigration into Shensi has not yet commenced. But if the government would assist it, Hupè and Sz'chwan would give a large contingent, and other provinces would follow.

As regards the character of the population, the contrast between it and that of Shansi is very marked, on the high road. After having experienced pleasant treatment throughout that province, I was surprised to find the people very troublesome immediately after having crossed the Hwang-ho. From there to Si-ngan-fu, a great dislike of foreigners, and a decided vulgarity in the character of the people were conspicuous. This was no longer the case west of Si-ngan-fu, where I left the great military road to Kansu. The difference was so great, that I am inclined to ascribe it partly to the influence of the soldiers, although my direct intercourse with these was quite agreeable.

The inhabitants of Shensi are, in the main, an agricultural people, and are not given to any noteworthy industrial pursuits. Those who live in cities are not without enterprising commercial spirit. Similar to the Shansi men, they leave the province to do business elsewhere. In Sz'chwan they live in considerable numbers, and have a large portion of the commerce in their own hands.

PRODUCTS AND CLIMATE.

Northern Shensi is exclusively an agricultural country, and enjoys the reputation of being among the most productive regions in China. In the Wei Basin, and extensive regions besides, two crops are raised, of which the staples are, wheat in winter, and cotton in summer. Being a loess-region, it is unfit for rice, with the exception of ravines in the hills, and in these it is planted. Kauliang, pulse, millet, maize, groundnut, are additional summer crops for home supply. Barley, beans, peas, lucerne, and chiefly, rapeseed and poppy, complete the list of the prominent winter crops. Hemp and tobacco are, too, extensively cultivated.

When speaking, in another page, of the, apparently, self-manuring faculty of the loess, I cited the Wei Basin as an illustration. It must strike every observer with surprise, to see a depopulated country cultivated throughout its extent, and made to yield a quantity of agricultural produce which cannot be much inferior to that which was raised when the country was still supporting a dense population. My experience is, of course, limited to the region adjoining the highroad and such by-ways as I took occasionally. I mentioned as the probable cause, the ease with which loess-ground is tilled, and its faculty to give satisfactory crops without other manure than a cover of loess taken from below the surface, provided the soil receives the rain it requires. The consequence is, an extraordinary abundance in good years, and, as with the moisture the manure fails, a complete famine in dry seasons. When such is the case, rice and other grain are imported from Hupè, prices are high, and the commerce of the province is prostrate. I happened to visit the Wei Basin after an unusually good season. The bread (if the steam-cooked "momo" deserves that name) had not for many years attained so large a size, and people were feasting in plenty. The troops, for which rice had been imported in quantity in the preceding years, lived entirely on wheat from Shensi. The abnormal excess of the ratio in which the extent of cultivated ground is to the number of inhabitants, in this as compared with previous years, and the probability that it will continue to exist, will have the effect to allow this state of ease and plenty to last for many years.

The instances are rare of the climate coming so much in aid of the natural fertility of the loess-ground as was the case in last year. From the data I was able to collect, it appears, that the climate of Shensi and Kansu is dryer than that of Shansi, while the neighbouring provinces of Chili and Honan would follow in ascending order, as regards the quantity of rain they receive. The destructive rains, which prevailed in Chili in the summer of 1871, extended through Siuen-hwa-fu to northern Shansi. The place of Tai-yuen-fu suffered much less, and as the Tung-kwan is approached the quantity of rain which fell in that year is found to have been less and less, until in the Wei Basin a region is reached, which received just the right quantity of rain required to produce that exceptionally favourable state of things which I have described. In relation to this subject, it is particularly worthy of note, that the heavy rain-fall which, about the middle of September,

lasted, at Peking, ten consecutive days and nights, spread far south-westward. On the Wu-tai-shan, its duration was a fortnight (11th to 24th September), at Tai-yuen-fu six days, and in Shensi only a beneficial rainfall is reported to have taken place in that season. Farther southwest, however, on the upper Han and in Sz'chwan, there happened again, at the same season, which is usually dry, an extraordinary fall of rain, lasting from six to eight days, the destructive effects of which I shall have to mention when speaking of Sz'chwan. The rains appear to have not extended southeast of that belt of provinces.

The winter is moderately cold, in northern Shensi, and not of long duration. The coldest portion of the Wei Basin is its lowest part, near the Tung-kwan gate. Snow falls a few times in winter, but disappears after some days, and assists the growth of the crops during the bright days which follow. I travelled in the Wei Basin in January, and did not suffer from cold. The sky was usually serene, the atmosphere hazy, and no strong winds did occur. The winters at Lan-chau-fu in Kansu are said to be considerably colder. A large portion of the troops were in winterquarters in the Wei Basin, and were to start for Kansu after Chinese New-Year, so as to arrive there after the coldest time.

Both provinces have no evergreen trees or shrubs, although bamboo is cultivated in wet places, in the Wei Basin. Fruit trees are plentiful. The one hundred-li-orchard on the northern foot of the Fung-tiao-shan continues west of Tung-kwan, to the northern foot of the picturesque granite-range of the Hwa-shan. An idea of the plenty of fruit can be formed from the fact, that persimmon *(Diospyros Kaki)* are sold in time of harvest, five for one cash, which is equal to 6,000 for one dollar.

Northern Shensi derives little benefit from its mineral produce. All places situated in the neighbourhood of the navigable portion of the Wei River are supplied with a superior kind of bituminous coal and coke from Ho-tsiu-hien in Shansi. The locality is situated near the confluence of the Fuen-ho and Hwang-ho. The coal is put on boats, and distributed by them to Tung-kwan, Si-ngan-fu, and Han-yang-hien.

Yet, northern Shensi is full of coal. North of the Wei River, near Si-ngan-fu, the first low hills rise at the distance of from 30 to 40 miles, and though they are "tu-shan," that is, loess hills, the gullies are cut down into coalbearing strata which under-lie the loess. A dirty friable coal, full of sulphurets, is mined there for local consumption. Farther north, in the departments of Fu-chau, Ya-ngan-fu and Yu-lin-fu, the coalbearing ground was described to me as being very extensive, and good kinds of coal said to be extracted in numerous mines. But the difficulties of transportation put the coal entirely out of the reach of any place beyond the next surroundings. The mode of occurrence of the coal, in the bottom of ravines cut through the cover of loess is so similar to that of Shansi as to make it probable, that the tablelands of coalformation and postcarboniferous strata which spread from the Tai-hang-shan across the Fuen-ho towards the Yellow River extend over the greater portion of northern Shensi.

Mr. Pumpelly mentions, on the authority of native books, petroleum springs in Ya-ngan-fu. I received no information regarding them.

It is probable, that iron ore is diffused through the coalbearing strata, in a similar manner to that in which it occurs in Shansi. Yet, all the iron used is imported from that province, apparently because Shensi lacks anthracite and wood, with which alone the Chinese are able to smelt iron ore.

Salt, of an inferior kind, is made in a few places in northern Shansi, and can be purchased at nine cash a catty; but it is only used by the poorest people.

PLACES OF COMMERCE.

The Wei Basin has only one great place of commerce. It is Si-ngan-fu, the capital of the province. No other provincial capital in China, with the exception of Canton, is so perfectly the metropolis of an extensive region. Besides it, two other places are worthy of notice, namely, *Han-yang-hien*, which has a great portion of the Kansu-trade; and *Kwei-chin*, a populous mart situated 100 miles west of Si-ngan-fu, on the Wei-river, and important for the commerce with Han-chung-fu and Sz'chwan. But both places are, in a great measure, dependencies of Si-ngan-fu.

3.—*SI-NGAN-FU.*

The capital of Shensi has that in common with most other large Chinese cities that, in approaching it, one is not in the least aware of being so near a populous and great commercial place. No country resi-

dences or much increased traffic give evidence of it. In every respect, the country, with its destroyed villages, scanty population and general agriculture, continues just as before. All at a sudden, as if put there by the humour of some despot, rise the extensive walls which enclose bustling life. At Si-ngan-fu, the impression of artificial growth, so frequently conveyed by these walled squares when they stand in the midst of a plain, is relieved by the existence of extensive suburbs, which join the gates and are small walled towns themselves. That on the east-gate was destroyed by the rebels, but is nearly rebuilt. The gates of Si-ngan-fu are more magnificent than those of Peking, but the walls have not quite the colossal proportions of those of the capital of the Empire. They enclose a square of just ten li (six geographical miles) each side. They, and not the Imperial armies, have protected the city from invasion during eight years of Mahomedan rebellion. From 1868 to the summer of 1870 the rebels lay around the city, so as nearly to prevent any intercourse. Now, since the country is freed from its terrible enemy, the place has proved its vitality by the immediate revival of business. The immense reduction in number of the population of Shensi and Kansu, and the still continuing occupation of a portion of the latter province by the Mahomedans did of course not allow commerce to regain the dimensions it had before 1861; but even now it is not inconsiderable.

The cause of this vitality is this, that Si-ngan-fu occupies a dominant position, such as few inland cities enjoy that are not built at the places of confluence of navigable rivers. It is situated at the confluence of those few roads of traffic which, as I have pointed out, are the only possible connections for mediating the intercourse between the Wei Basin and the eastern and northern provinces, and occupy therefore indeed, in some measure, the place of rivers. Here converge, like rays in a focus, the three eastern roads, the Shansi-road, the Honan-road, and the Hupè-road, while from the southwest they are met by the Sz'chwan road. On the other hand, spread out from here the various channels for collecting the trade, and directing all political life, of Shensi and Kansu, and for keeping up the relations of whatever kind between China and Central Asia north of Tibet. It is this remarkable position which has made Si-ngan-fu the capital of the Empire in ancient time. The Chou-dynasty (1122 to 249 B.C.) is believed by the Shensi people to have resided at Fung-tsiang-fu, 120 miles west of Si-ngan-fu. The great despot Tsin-chi-hwang (246 to 202 B.C.)—the same who commenced to build the Great Wall, first against the Hiongnu who lived in what is now the Ordos country, and then in greater extent east and west; who consolidated for the first time into one Empire nearly the whole of what is now China proper, including Sz'-chwan; and who burnt the books of Confucius, together with some hundred scholars who possessed most knowledge of them—was the first to remove his residence to the immediate vicinity of that place where now stands Si-ngan-fu. The military exploits which he was enabled to execute from it, made the name of the Tsin great throughout Asia. Afterwards the first fourteen Emperors of the Han dynasty resided at Si-ngan-fu. This family occupied the throne from 202 B.C. to 221 A.C., but the last twelve Emperors resided at Loyang, near Ho-nan-fu. The Huns commenced then to be supreme at Si-ngan-fu, where they ruled, by the name of the (second) Chou-dynasty. This was till 352 A.C. The dynasties of the Tang (618 to 905) and Sung (960 to 1127) resided at Si-ngan-fu. Thus, during more than 2,000 years, with some intervals, was this city, or its vicinity, the residence of the rulers, either of portions, or of the whole, of the Chinese Empire. Among the Emperors who made it the capital were not only some of the most powerful in the history of China, but some of those who are till now held in profound veneration on account of their wise and just rule.

While the aggressive power of the Emperors was chiefly exerted in the directions to the east and south, they had always to keep on the defence towards the north and west. The fine wheat crops of the Wei Basin must certainly have been attractive to the people living in the deserts or on the cold pasture grounds which spread in those directions. They made repeated invasions into the territory of Shensi, and it appears that the Wei Basin has seen alternately periods of high prosperity and of perfect decay, and that the immense destruction of life exerted by the Mahomedans was not the first instance of that kind during its history. Around Si-ngan-fu, there are constantly dug up from the soil, not only curious coins of various of the ancient dynasties, but bronzes which date from the first Chou-dynasty and are not surpassed in taste and finish by the productions of later periods. The antiquarian finds in no place in China so much opportunity for collecting objects of interest as on the classical soil of the Wei Basin. At a comparatively recent epoch of Chinese history, during the Tang-dynasty, arts and sciences flourished at the court of Chang-ngan, the present Si-ngan-fu. Dr. W. Williams says of this celebrated line of princes: "during the 287 years they held the throne, China was probably the most civilized country on earth, and the darkest days of the west formed the brightest era of the East." Si-ngan-fu was the centre of that country.

The city has retained to this day something of its political importance and may be called the capital of the north-west. It may be temporarily reduced in importance by events such as those of the last decade, but it cannot lose it, and will revive after every blow.

The population is said to be about one million, including 50,000 Mahomedans. These were formerly thriving citizens, but, being forbidden to leave the city, are restrained from commerce and reduced to poverty. Their fortunes have been taken from them by squeezes, and they live now on very subordinate occupations. The pagan inhabitants are aware of the dangerous enemy they harbour among them, and only prevented by the mandarins from killing all Mahomedans. If the number of inhabitants is correctly given, Si-ngan-fu is now probably the largest and most populous city in China, next to Peking and Canton.

ROADS OF COMMERCE COMMANDED BY SI-NGAN-FU.

1*st.*—*The Tung-kwan road.*—This road leads in an easterly direction over nearly level ground to the Tung-kwan gate, a distance of 310 *li*, or 86 miles.* In its last portion it is accompanied on the south by the highly picturesque granite range of the Hwa-shan, which terminates suddenly. Just opposite its termination commences, in the northeast, at 15 miles distance, the granite range of the Fung-tiao-shan, which thence stretches east-northeast. The two steep ends are connected by a concave line of very gentle curvature. It is the section of the surface of a trough of loess, which thence continues east. To the west, the loess is cut off abruptly by an almost vertical face along the line which connects the two granite ranges, and this face is joined on the west by a plain which is about 400 feet lower than the centre of the trough, and about 1,500 feet lower than its sides. That plain is the lowest portion of the Wei Basin. In it, the Yellow River makes its great bend, and receives the Wei River from the west. The united river, in approaching the loess-face, is not stowed up on it, as it may have been in former time, but breaks through the loess in a narrow passage. These are the narrows of Tung-kwan, so called from a fort erected at, or rather in, the mouth of the gorge, on the south-side of the river. The fortress encloses a city, and has two magnificent gates, through which all the traffic going eastward from Si-ngan-fu must necessarily pass. Beyond the second gate, the river is crossed on boats, by those who go to Shansi; the road to Honan goes straight on. While the approach of the gates from the west is perfectly easy, all the inconveniences with which loess obstructs intercourse are at once met with east of them. The whole road to Honan-fu appears to consist in a series of the most difficult crossings of loess-ridges and loess-ravines, and to be one of the most trying pieces of cart-road in China. The Hwangho washes, alternately, the steep banks of loess on either side, and leaves no room for a footpath along its banks. Some circuitous trails may exist which allow to go from the Wei Basin to Honan-fu, without passing the Tung-kwan, but they are certainly too difficult for commercial traffic, and too unsafe for military purposes, because a garrison at Tung-kwan can easily defend the narrow passages which the gorges in the loess may allow between it and the Hwa-shan. The fortress of Tung-kwan forms indeed most effectually the eastern gate of Shensi and Kansu, and its possession is, strategically, the key to those provinces, as it was formerly the key to the east for those Emperors or usurpers who were in possession of Shensi.

For going to Shansi, it is not necessary to pass through the fortress. I have mentioned the second crossing of the Hwang-ho at the fortress at Tai-ching-kwan, a little distance higher up the river. It is mentioned by Marco Polo, and probably the place where he went across. Through Shansi lies the high-road from Si-ngan-fu to Peking, Chang-kia-kou and Kwei-hwa-ching.

The only foreign port that is slightly interested in the Tung-kwan roads is Tientsin. Commerce between that place and Si-ngan-fu is possible by two ways. Starting from Tientsin, the first is by Hwo-lu-hien, the plain of Tai-yuen-fu, and Ping-yang-fu, the other by Tau-kou-chin and Ho-nan-fu.† Both appear

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* Of the *li* of Shensi 250 are equal to one degree.

† The distances on these roads are as follows:

1. Si-ngan-fu to Tai-yuen-fu 1,440 *li*; freight on carts, including hong charges, can be had at Tls. 2.8.0 per picul.
   Si-ngan-fu to Hwo-lu-hien 2,000 *li*; freight from Tls. 3.8.0 to Tls. 4.5.0, with carts; and Tls. 5 to 6 with mules.
   Si-ngan-fu, via Hwo-lu-hien to Tientsin, 2,660 *li*; freight between the two latter places is Tls. 0.6.0 per picul, part of the journey being made by water.
2. Si-ngan-fu to Honan-fu 1,000 *li*.
   Si-ngan-fu to Tau-kou-chin 1,500 *li*.
   From Tau-kou-chin to Tientsin, a distance of 1,200 *li*, goods go by water, at a very low rate. (See letter on Honan and Shansi p. 6.)

to have been in practice during the Taiping rebellion, and are still used for a small portion of the Shensi trade; but neither of them will be able, hereafter, to compete with the Lao-ho-kou road. The northernmost portion of Shensi, however, chiefly the department of Yu-lin-fu, will probably continue to receive some supplies from Tientsin, via Hwolu, Hin-chau, So-chau, and Pau-te-chau.

The Tung-kwan road is of supreme importance in a political and strategical respect, as it mediates, without exception, the entire traffic between the southwest of the Empire (Sz'chwan, Yünnan and Tibet) and Peking, together with the whole northeast. It is one of the chief roads of travel in China, and the greatest military road. Mandarins going to Court, or to the examinations in Peking, are constantly moving on it, and it is the way taken by the majority of the tribute-bearers. It mediates, too, the direct through-trade, consisting mostly in articles of much value in proportion to their bulk, which exists between Sz'chwan and Kan-su in the west, and Peking in the east.

2*d.*—*Lao-ho-kou road.*—Starting from the east-gate of the city of Si-ngan-fu, this road follows the Ta-sui-ho, a tributary of the Wei-ho, and leads over a convenient pass to *Shang-chau*. From there it goes to *Lung-kiü-tsai*, a Custom's station of Shensi, situated on the Tan-ho. This place is at five days journey from Si-ngan-fu, and can be reached by carts. Boats can come up to it from the other side at high water only. When the river is low, land-travel must be continued two days further, to *Ting-tse-kwan*, a Custom's station of Honan. From there the river is always navigable. Another road is, from Shang-chau to *Man-chang-kwan*, six days from Si-ngan-fu. That place is situated on a larger river, which is always navigable, but the land-road to it is not so convenient as that to the two other places. The descent from each one of the three shipping marts to Lao-ho-kou on the Han river is made in about four days. From twelve to sixteen days are required up-stream. The whole journey from Si-ngan-fu to Han-kau can be made in twenty days, but from forty to sixty days are required for the trip in the opposite direction, if made by water; by land it can be executed in twenty-three days. Freight from Lao-ho-kou to Si-ngan-fu is Tls. 1.2.0 per picul, from Hankau to Si-ngan-fu about Tls. 1.4.0. The ease and cheapness of transportation put this road far a-head of those which pass the Tung-kwan gate, as far as the supply of Si-ngan-fu with southern produce and foreign goods is concerned.

3*d.*—*Road to Han-chung-fu and Sz'chwan.*—As a subsequent chapter shall contain some particulars regarding this road, I will here only mention its existence.

4*th.*—*Road to Kansu and Central Asia.*—There are two roads from Si-ngan-fu to *Lan-chau-fu*, the capital of Kansu. The common cartroad goes by Pin-chau and Ping-liang-fu. It is said to be a convenient road, without any difficult passage. The other passes through Fung-tsiang-fu, Tsin-chau, Ling-tao-fu. It is described as mountainous and difficult, and only practicable for pack-animals. At present, both roads are used for military purposes. The commercial traffic seeks small and circuitous by-paths, to avoid the rebels and, even more, the Imperial soldiers. The distance to Lan-chau-fu is 1470 *li*, which are divided into 18 *tsan* or stations. Here the Yellow River is crossed for the last time. Beyond it, one road follows the river down to *Ning-hia-fu*, a city which has lost its ancient importance, but is still a place of considerable trade for the Oeloet and Ordos Mongols. Another goes west, to *Si-ning-fu* (260 *li*), and from there to Lhassa (3,600 *li*). Although Si-ning-fu is an exceedingly lively place, and a great trading centre for the people of Kokonor, who bring there the produce of their mountains, such as rhubarb, musk, yak-tails, medicines of various descriptions, the further road to Lhassa appears not to be of any commercial importance. What Tibet needs of Chinese produce, it receives from Sz'chwan.

Both these roads are insignificant, as compared with the third, which goes from Lan-chau-fu, in a north-westerly direction, to Liang-chau-fu, Kan-chau-fu and Su-chau, and thence through the Kia-yü-kwan gate of the Great Wall to Hami, on the eastern end of the Tien-shan range. There it forks into two branches, the *Tien-shan Nan-lu* and the *Tien-shan Pe-lu*, which follow, respectively, the southern and the northern foot of that gigantic mountain-range, and lead through regions which derive their comprehensive political names, in Chinese, from those of the two roads.

It is the merit of Abel Rémusat and Carl Ritter, to have demonstrated the remarkable nature of the lines followed by these great western roads. Between the colossal mountains of the Kwen-lun system, which form an almost impassable barrier to the south, and are inhabited by a mixture of tribes most of which are considered to be of the Tibetan family, and the elevated desert which stretches boundless to the

north, and is inhabited by the Oeloet, an East-Turkish tribe, a narrow channel extends in a north-westerly direction from Lan-chau-fu, hundreds of miles long, and sometimes no more than a few miles wide, with level bottom and much fertile ground. Its western end is the key to Central Asia, for, immediately beyond it, commences the sandy plain of the Gobi Desert. The Oasis of Hami is then reached, and beyond it, level or undulating ground (slightly interrupted by hills on the north) extends on either side of the Tien-shan range. But only a narrow strip on the southern slope, which is little exceeded in width by another on the northern slope, are fit for agriculture. The rest is, desert on the south, and pasture ground on the north. Along the southern strip, the road goes on from Hami to Yarkand, Kashgar and Khoten; and along the northern, to Barkul and Ili-ho or Kuldja, near the present Russian frontier.

Since time immemorial, commerce has found out the natural road from Lan-chau-fu to Su-chau, and its further continuation and bifurcation. Along the Nan-lu, the fame of the Tsin dynasty spread to the Persians and Romans. Fourteen centuries afterwards Marco Polo travelled on it to Lan-chau-fu, to go thence by Ning-hia-fu and Kwei-hwa-ching to the residence of Kublai-khan. The Chinese Emperors were, at an early period of history, awake to the importance of the possession of these channels of international traffic, because it gave them the dominion of Central Asia. That portion, chiefly, between Lan-chau-fu and the Kia-yü-kwan, has, since two thousand years, been defended with the utmost pertinacity, and not unfrequently at a great sacrifice, not only because it is the only military road to countries at a farther distance, but also because, by having possession of it, the Chinese kept their western enemies, the Oeloet (who were formerly much more numerous than they are now) and the mountain tribes of Kokonor asunder. In settling that strip with colonies, they drove a wedge between those two nationalities, which, it was feared, would at once make common cause against China, if the possession of that narrow passage were abandoned. To strengthen the position, the Great Wall was pushed a-head along the north side of the channel, so as to divide this from the steppe of the Oeloet. Where the channel ends to the west, the Kia-yü-kwan gate was built. In many epochs of its history, the Chinese Empire was effectually locked up, by closing that gate, and opening it expressly for those only who had permission to enter.

Since the time when the Emperor Hia-wu-ti of the Han dynasty, nearly 2,000 years ago, first extended the supremacy of Chinese rule to the frontiers of India, Persia and Bokhara, and, with the view of strengthening it, established Chinese colonies and Chinese highroads lined with cities through the whole extent from Kansu to the far West, the tendency has prevailed to preserve those distant boundaries. Alternately, succeeding Emperors had to relinquish their hold of the regions beyond the Kia-yü-kwan gate, and contrived to re-establish it, but at no time did they lose complete possession of the channel east of that gate. The present dynasty succeeded in establishing the rule in the far West firmer than any other before, and Kien-lung could undertake to extend the boundaries of China Proper to Ili, and to embody the whole Pelu into the province of Kansu (in 1757.) Commercial relations were more flourishing than they had probably ever been before, when the Mahomedan rebellion broke out, and the Chinese lost (in 1865) not only the whole of the Tien-shan Nanlu, and Pelu, but also the Kia-yü-kwan gate, and that whole portion of Kansu situated beyond Lan-chau-fu.

These considerations will show of what vital importance, from a political and strategical point of view, is for the Chinese the re-establishing of their power, at least to the Kia-yü-kwan; and I have already pointed out, in the letter referred to above, that they will probably succeed, not only in this object, but also in regaining supremacy, for some time at least, of portions of the Nanlu and Pelu. The commerce to those regions will then revive immediately, and it may soon take larger dimensions than before, on account of the advance of the Russian dominion from the west.

A small itinerary, printed for the use of travellers at Si-ngan-fu, gives the following distances:

From Si-ngan-fu to Lan-chau-fu	1,470 *li.*	
„ Lan-chau-fu to Su-chau	1,450 „	
„ Su-chau to Hami	1,560 „	
Total from Si-ngan-fu to Hami		4,480 *li.*
Tien-shan Pelu:		
From Hami to Barkul	330 *li.*	
„ Barkul to Ili-ho (Kuldja)	3,210 „	
Total from Si-ngan-fu to Ili-ho		8,020 *li.*

Tien-shan Nanlu :

From Hami to Pidjan	980 *li*.	
„ Pidjan to Turfan	240 „	
„ Turfan to Ku-chě	1,690 „	
„ Ku-chě to Aksu	690 „	
„ Aksu to Yarkand	1,170 „	
Total from Si-ngan-fu to Yarkand		9,250 *li*.

The following distances complete the table :

From Yarkand to Kashgar	490 *li*.
„ Yarkand to Khoten	650 „
„ Aksu to Ushi	240 „
„ Aksu to Ili-ho (by direct mountain-road)	1,040 „
„ Turfan to Urumtsi	490 „
„ Barkul to Pidjan	160 „

It is not stated what kind of *li* is meant. If it is the larger one (200 to one degree), then the distance from Si-ngan-fu to Ili-ho is 2,773 statute miles, and that to Yarkand 3,198 miles.

To travel these great distances is not at all considered any great enterprise in Si-ngan-fu, and it was indeed simple and easy work until the time of the rebellion. Camels were little employed, and carts the usual means of conveyance, for travelling as well as for the transportation of goods. In making contracts, the time to Ili-ho was calculated at 80 stations, of 100 *li* each, although, practically, more than 80 days were required for the journey. A cart was hired at Si-ngan-fu for the entire distance. A two-mule cart, with a load of 500 catties and two or three passengers, or 800 catties without passengers, was hired at the price of Tls. 0.8.0 per station, or Tls. 64 for the entire distance. This is equal to the rate of 2.24 copper cash per catty for every 100 *li*, which is extremely low even in China. Food for men and animals is said to have been very cheap along the road, chiefly beyond the Kia-yü-kwan. Of that portion of the road going through the Gobi Desert, only three days were through a completely arid and waterless region. Some travellers report with a shudder of the horrors of passing it on a stormy day in winter; others went through it with perfect ease. The people along the Nanlu and Pelu are described as extraordinarily goodnatured, and much better men than the inhabitants of Shensi.

From the fact, that the stations are calculated at 100 *li* each, and that two horses or mules only are employed for a load of 800 catties on so long a journey, it follows, that the road is easy throughout, and this is corroborated by those who travelled over it. The steepest grades are probably between Si-ngan-fu and Lan-chau-fu, where the stations are comparatively short. Beyond the valley-ground on the Yellow River, the road enters a natural gate, apparently formed of loess, and then rises gradually towards Liang-chau-fu. Till a short distance east of that place continues, as I was told, "the yellow earth, which is everywhere cultivated, and lies so thick that it is cut by deep gullies, and is inhabited by men who live in caves." This is an unmistakeable description of loess. It ends with the last affluent of the Yellow River. From Liang-chau-fu, level ground begins, consisting partly of sand and pebbles, and partly of fertile soil. The narrow belt which constitutes the departments of Kan-chau-fu and Su-chau is reported to be a very productive region and to abound in grain. Agriculture ceases to be general with the approach to the Kia-yü-kwan; but patches of ground are cultivated beyond it. Hami is a level oasis, the beauties of which have often been extolled. The Nanlu is a warm and very productive country, abounding in wheat and cotton; the Pelu is much colder, but agricultural products are plentiful and cheap. The Chinese inhabit the cities, where they are merchants and artisans, and they cultivate the soil. To their industry is due, according to all accounts, the productivity of the two agricultural belts which skirt the foot of the Tien-shan on either side. Many Chinese returned to Shensi and other provinces, as soon as the rebellion broke out. But Jakub Beg, the present ruler of Yarkand and the Nanlu, whose power extends to Hami in the east, treated those who remained so considerately, that they were induced to continue in their occupations. Afterwards, however, attempts were made to force them to adopt the Mahomedan faith.

Little doubt can exist that, eventually, China will be connected with Europe by rail. No direct connection of this kind is possible south of the Wei Basin, and any road to the north of it would have to keep entirely north of the Yellow River, and run altogether through desert countries. The same reasons

which have confined the commerce of China with the far West, during thousands of years, to the natural road which I have described in the foregoing pages, will be decisive for the establishment of steam-communication. As regards natural facilities, and the supply, at both ends of the line, of populous, productive and large commercial countries, the only line which ever can come into consideration is that by Si-ngan-fu*, Lan-chau-fu, Su-chau and Hami. It is a remarkable coincidence, that this whole road, including the Pelu, is well provided with coal. Kansu is reported to rival with Shansi as regards the richness and extent of its coal-fields. No department of the province, north of the Tsing-ling-shan, appears to be deficient of coal, and in some of them a superabundance of it is said to exist. I am told that anthracite does not occur in that province, but that bituminous coal is mined, in many localities, in large blocks and burns with very little smoke and smell. One intelligent informant, a native catholic priest who has travelled extensively in the Nanlu and Pelu, asserts, that from Lan-chau-fu to Hami coal is used for domestic purposes at every station on the road, and that the same is true of the whole extent of the Pelu. No coal exists on the Nanlu, where brushwood and grass are applied in its place. The region which is supplied from a coal-mine, in China, by land-transport alone, has scarcely in any case a radius of more than 300 *li* from the place of extraction. If full credence is given to the statement, we are therefore bound to assume, that the coal-formation extends, with few interruptions, from eastern Shansi to Ili, through thirty degrees of longitude. There is scarcely an instance on record, where so many favourable and essential conditions co-operate to concentrate all future intercourse on so long a line upon one single and definite channel.

Commerce of Si-ngan-fu.

The chief trade of Si-ngan-fu, in normal times, consists in the importation of silk from Chekiang and Sz'chwan, tea from Hupè and Hunan, sugar from Sz'chwan, and the exportation of this merchandize, together with a few other articles, to Kansu, Turkistan, Ili, and Russia. The trade in each of these articles is said to have been very large and yielded good profits. It is the chief foundation of the wealth of the commercial houses in Si-ngan-fu.

Shensi itself produces nothing for the foreign trade. Of its own products it sends to Shansi, cotton, wheat and opium, in return for coal, iron and salt. Kansu takes cotton and wheat, and sends back tobacco, medicines, chiefly rhubarb, furs, skins, wool, felt, mules, cattle, sheep. Some of these articles are got from the Mongols and from Kokonor, in exchange for cotton, tea, tobacco, &c.

Han-chung-fu and Sz'chwan are provided from Shensi with cotton, wool, skins and furs. Han-chung-fu sends rice in return, Sz'chwan gives sugar, silk and opium.

The direct imports from Hupè are chiefly tea, cotton piece goods of native manufacture, and rice. Han-kau sends foreign goods, which take a prominent place at Si-ngan-fu, paper from Kiang-si and Hunan, porcelain from Kiang-si. The silk trade with Chekiang is done directly in Hang-chau-fu and Su-chau-fu, by Shensi merchants. The exports from Si-ngan-fu, in the direction of Hupè, are not considerable. Rhubarb and medicines, which are mostly sent directly to Siang-tan and Canton, take probably the first place; opium, wool, and furs range next.

Most of these articles of commerce are of no direct interest for foreign commerce. Several of them deserve, however, a passing notice.

Opium is foremost among them, because in the product of Shensi the foreign opium has a dangerous rival. Although much inferior to Indian, as all Chinese opium is, its properties are much esteemed by the smokers. At Si-ngan-fu, the price of one tael's weight of opium is—of "Sz'chwan" Tls. 0.2.0, of "Kansu" Tls. 0.4.0, and of "Shensi" Tls. 0.2.8. Indian opium is imported in tins of 1 tael's weight from Canton, and sold at Tls. 10 per tin, but is very little used. Opium from Honan and Shansi is not sold at Si-ngan-fu. The former ranges in value between "Sz'chwan" and "Shansi," while "Shansi" is only inferior to that from Kansu. The most correct idea of the relative value of the opium grown in different provinces is

* When speaking on this subject on a previous occasion (letter on Honan and Shansi p. 12), I considered the passage of Honan-fu as the only possible approach to Si-ngan-fu. It is undoubtedly the most important. But possibly another approach may be feasible, following approximately the Lao-ho-kou-route.

probably formed, if the first price at the place of production alone is considered. From this point of view we arrive at the following order :

Original price of	Opium in	Kansu about	...	...	...	Tls. 0.3.8	per tael.
Do.	do.	Shansi	...	...	...	„ 0.3.3	„
Do.	do.	Shensi	...	...	...	„ 0.2.8	„
Do.	do.	Sz'chwan	...	...	...	„ 0.1.2	„

Considering the relative prices of equal weights alone, and not the weight of opium yielded on an equal area of ground (of which it is very difficult to get correct figures), the cultivation of the poppy would appear to be far more remunerative in the north than in the south. But another item must be considered, which is, the relative value of the crop which the poppy replaces. In the cold climate of Shansi, the poppy does only thrive on the best fields, on those which are level and can be irrigated. It occupies probably the larger portion of the best gardenland, where it replaces a certain and prolific wheat crop or the more valuable vegetables. No opium is exported from the province, and the drug is furnished to the smokers at three times the price at which those of Sz'chwan get it. In addition, a considerable amount of opium is imported from the neighbouring provinces. The planting of the poppy must, therefore, be considered, in Shansi, as highly injurious for the economy of the province, and as impoverishing the population. I will show, when speaking of Sz'chwan, that there and in Yünnan, the poppy replaces crops of inferior value. Kansu shares the climate and soil of Shansi. Under equal circumstances the cultivation of the poppy should be there just as injurious as in Shansi. But the population being small, and the arable land extensive, Kansu does not consume all the opium it produces, but exports considerable quantities of it both west and east, and imports none ; the poppy is therefore, probably, a valuable and beneficial crop. In both provinces the cultivation is not likely to increase much beyond its present state. Shensi is much more favourably situated in this respect, because the poppy thrives on loess-fields which are not irrigated. In the departments of Kien-chau and Fung-tsiang-fu, the lower portion of the loess-basin consists of rolling ground, which is interrupted by a few deep gullies. The poppy is not cultivated on the top of the swelling ground, which is too dry. But every slope, however gentle its inclination, is terraced. Those terraces which are well shut in on two or three sides are selected for the poppy. I saw extensive fields cultivated with it, and in some portions of the country it formed the most conspicuous winter-crop next to wheat. In this case, the poppy takes the place of an ordinary and uncertain crop of wheat, peas, beans, or rapeseed ; and as the opium is a much more valuable crop than these and is largely exported, its planting is perfectly justified from the standpoint of common economy. The area of the fields planted with poppy will rather increase than decrease. As regards the attempts on the part of the Government to check its cultivation, it appears that no power would be able to stop now the production of a narcotic for which the people have attained a craving. They are unanimous in the accusation, that the mandarins were the first, in every province, to smoke opium, and that the greatest relative number of smokers is still found in the yamêns. If the higher authorities were earnest in their efforts to suppress the cultivation, they would still be impotent to check the venality of their subordinates. And if that could be encountered, the people would revolt. An instance of this kind was related to me in a district of Ping-yang-fu, which produces much opium. An extra tax of 400 cash is there levied from every mow planted with the poppy. In 1870, the money was not paid. Before harvest time, the district mandarin sent out his men, and had the pods of all the poppy-plants cut off. In the following year, the tax remaining unpaid, the men of the yamên returned, to repeat the destruction. But the people of the whole district made armed resistance and drove them off. They collected then their opium, without paying any duties.

Wheat.—This is the staple of Northern Shensi. It is exported to Shansi, Han-chung-fu, Kansu, Kokonor, and influences the provincial commerce more than anything else, on account of the great fluctuation of its price. At the end of 1871, the price of wheat-flour was one Tael per picul. In 1870 it was Tls. 3.3.0, and in 1869 it had reached as high a figure as Tls. 6.6.0 per picul. The flour is the finest and whitest I have seen in China.

Cotton was sold in 1871 at Tls. 13 to 14 per picul. Although the amount raised is very large, the demand for it from Shansi, the northernmost departments of Shensi, Kansu, the Mongol and Oeloet countries, Kokonor, Han-chungfu, and Sz'chwan, is so great, that considerable quantities must be imported, besides, from Honan.

Tobacco.—The production of Shensi is large, but of inferior kind, and sold at Tls. 3.2.0 per picul. Tobacco is the most valuable product of Kansu, chiefly the "sui-yen" or waterpipe tobacco of Lan-chau-fu, which is sold at Tls. 26 per picul. It is brought in great quantity to Han-yang-hien near Si-ngan-fu, and sent from there to all provinces of the Empire. Notwithstanding the troubled state of Kansu, I met many mule-trains loaden with that valuable product.

Provincial Trade.—Si-ngan-fu does nearly all the collecting and distributing trade of northern Shensi. Good wagon-roads go off to the west, north and east, and connect the cities of the Wei Basin (between 35 and 45 in number) with Si-ngan-fu. Farther away, there are bridle-paths. I have observed in another page, that some districts of the northeast are more naturally supplied from Tientsin, via Hwolu-hien. Much of the provincial trade of Kansu centres, too, directly in Si-ngan-fu, without the interference of Lan-chau-fu.

Transit Trade.—From the preceding review of the great trade-roads to Western Asia it is evident, what extensive tracts of territory are there dependent as to their supplies on Si-ngan-fu. The population of those regions is thin, but the people throughout the North and West are great consumers of tea. Sugar and silk were sent not only to Central Asia, but through Ili to Russia. The import trade from the remoter regions in the West was small. "Russian goods" and medicines formed the bulk of it, and when that freight could not be procured, a load of the celebrated dried melons of Hami was taken back by the carts returning to Si-ngan-fu. I will here mention only in passing another article of trade, which is in itself of little commercial value, but appears to have influenced, in early ages, the intercourse with the West more forcibly than anything else. It is the yü or jade-stone, which is found in Khoten, and came to China through Kansu.

The transit-trade between the South and the Northwest was always entirely in the hands of the merchants of Si-ngan-fu. Another direct through trade was and is carried on between Sz'chwan and the northeastern provinces. This commerce, which is not large, passes through Si-ngan-fu, but is done directly.

FROM SI-NGAN-FU TO CHING-TU-FU.

THE road which connects with each other the capitals of Shensi and Sz'chwan is among the most celebrated roads in China, because it establishes the only one existing practicable means of intercommunication by land between the northern provinces, and especially Peking, and those of the south-west and Tibet. It may be subdivided into five portions, the distances in which are as follows :*—

1.—In the valley of the Wei River :—		
From Si-ngan-fu to Han-yang-hien	50 *li.*	
„ Han-yang-hien to Hing-ting-hien	50 „	
„ Hing-ting-hien to Wu-kung-hien	90 „	
„ Wu-kung-hien to Fu-fung-hien	60 „	
„ Fu-fung-hien to Ki-shan-hien	60 „	
„ Ki-shan-hien to Kwei-chin	80 „	
„ Kwei-chin to Pau-ki-hien	60 „	
		450 *li.*
2.—Across the Tsing-ling-shan :—		
From Pau-ki-hien to the Tien-cha-ling pass	75 *li.*	
„ the pass to Fung-hien	145 „	
„ Fung-hien to Liu-pa-ting	177 „	
„ Liu-pa-ting to Ma-tau-chin	90 „	
„ Ma-tau-chin to Pau-ching-hien	95 „	
		582 *li.*
3.—In the valley of Han-chung-fu :—		
From Pau-ching-hien to Mien-hien	90 *li.*	
		90 *li.*
4.—Crossing of the Ta-pa-shan :—		
From Mien-hien to Sin-pu-wan	50 *li.*	
„ Sin-pu-wan to the Wu-ting-kwan pass	90 „	
„ the pass to Ning-kiang-chau	45 „	
„ Ning-kiang-chau to Chau-tien	140 „	
„ Chau-tien to Kwang-yuen-hien	93 „	
		418 *li.*
5.—In the "Red Basin" of Sz'chwan :—		
From Kwang-yuen-hien to Chau-hwa-hien	50 *li.*	
„ Chau-hwa-hien to Kien-chau	145 „	
„ Kien-chau to Tsz'-tung-hien	165 „	
„ Tsz'-tung-hien to Mien-chau	128 „	
„ Mien-chau to Lo-kiang-hien	90 „	
„ Lo-kiang-hien to Han-chau	100 „	
„ Han-chau to Ching-tu-fu	90 „	
		768 *li.*
Total distance from Si-ngan-fu to Ching-tu-fu (of 250 to one degree), or 637 statute miles.		2,308 *li.*

With the exception of that portion which lies in the Wei Basin, and the short passage through the valley of Han-chung-fu, the entire road leads through exceedingly mountainous countries, and its contruction was a difficult undertaking. Before it existed, Sz'chwan was a sealed-up country, inhabited by "barbarians." Han-chung-fu could be reached from Si-ngan-fu by mountain-trails, which followed, probably, the same few lines as those now existing. At an early day, the valley in which it is situated was a dependency of the northern Emperors. The only way by which Sz'chwan could then be reached was down the Han River and up the Yang-tse. But the difficulties and dangers of this water-road did certainly not make it adapted for a

* I have had no occasion to compare these distances, which were given me on the roadside with the official tables published in native itineraries.

conquering army. To get possession of Sz'chwan, it was necessary to build a road from Han-chung-fu to the heart of the province, which is Ching-tu-fu. The way in which this task was accomplished, in the third century before our era, is preserved among the people in a legendary way.* For the northern rulers, who had kept a footing in Han-chung-fu, the existence of that portion of the road was sufficient to keep Sz'chwan in subjugation. But when, in the third century after our era, a descendent of the Han-dynasty, and a sort of Chinese Hercules, by the name of *Liu-pi*, contrived to get supreme power in Sz'chwan, and, assuming the title of "Emperor," took his residence in Ching-tu-fu, he conceived the plan to conquer the North. He took easily possession of Han-chung-fu, and gained a basis of operation. But he needed a good road from there to the Wei Basin, in order to be enabled to throw large bodies of troops rapidly into northern Shensi. It is said, that he put his whole army, 100,000 men strong, at work, and that the great object was rapidly accomplished. Thus the connection between Ching-tu-fu and Si-ngan-fu was completed. It is worthy of note that this road, like probably all great highroads in China, was made exclusively for strategic purposes. No one of them appears to owe its existence to motives connected with the promotion of commercial intercourse. Until this day Liu-pi's road has remained the only practicable one in existence. Marco Polo went over it. Afterwards, it underwent a thorough repair under the Ming-dynasty. Its political importance, and the great traffic which goes constantly over it, make it necessary to the Government to bestow some care on its preservation; but no more work is done on it than is absolutely required to keep it open for traffic. The large interests which it represents should be sufficient inducement for the Government to rebuild it completely.

I will now pass in review the main features of the road, following the partitions used in the table of distances :—

1*st*—After the lengthy description of the Wei Basin, given in the last chapter, little need be said regarding that portion of the road which follows the Wei River. At Han-yang-hien it crosses over to its northern bank. The main wagon-road continues hence in a northerly direction to Ping-liang-fu and Lan-chau-fu, while the Sz'chwan road goes west, keeping at a little distance north of the river. It rises gradually, together with the surface of the loess, and traverses some deep gullies, in which affluents of the Wei River descend. The monotony of the country is relieved by the view of the high Tsing-ling-shan range, which rises beyond the river and culminates in the broad and gently rounded summit of the *Tai-pe-shan*, on which snow lies in summer. Its altitude is probably about 11,000 feet. From Ki-shan-hien a direct road to Pau-ki-hien may be taken, which reduces the total distance to that place to 410 *li*. *Kwei-chin* is, however, worth a visit. It is an exceedingly populous market-town, and the chief place of entrepôt for the trade with Southern Shensi and Sz'chwan. The town is situated on the Wei River, where it flows in the bottom of a deep canal immersed in loess. The sight which presents itself on arriving from the north at the rim of the loess-plateau is surprising. Terraces descend in rapid succession, and at the bottom, 600 feet below the rim, the Wei River meanders in a narrow strip of very fertile alluvial land, and beyond it rises the Tsing-ling-shan. Many villages and towns are scattered in the bottom of the channel, which is probably the busiest and liveliest portion of Shensi.

2*nd*.—*The Tsing-ling-shan*.—At Pau-ki-hien, the Wei River is crossed, and the ascent begins shortly afterwards. From here commence seven days of travel on the wildest mountainroads, because a range of extraordinary character must be crossed. Its northern foot, the summitline, the watershed, the various ranges of which it is composed, the formations of which it is made up—all have the uniform trend of about W. 12° N. to E. 12° S. The direct distance of the northern and the southern foot, at right angles to the line of strike, is 84 miles, the length of the road between the same points 163 miles. The line of highest summits, which nearly coincides with the watershed, is in the north. A short and steep slope, covered in its lower

* It is related that the Emperor Tsin-chi-hwang, desirous of subjugating the great territories of the present Sz'chwan, succeeded in bringing his army across the Tsing-ling-shan range to the valley of Han-chung-fu. From there his troops could easily move to the pass which carries now the name Wu-ting-kwan, but arrived here at a pathless wilderness. He offered relations of amity to the King of the Man-tse who resided at the present Ching-tu-fu, and in token of friendship, well knowing the avaricious character of that prince, offered him two cows which had the remarkable faculty of converting in their stomachs common food into pure gold, having previously taken care that the fame of the wonderful animals should spread and reach the ear of the King. Five delegates were sent to receive the costly present, but on their arrival at the Emperor's Court were given to understand, that the animals, requiring the greatest care, could only walk on well-constructed roads and must cross rivers on bridges. The Man-tse King then constructed the fine road which exists to this day. Tsin-chi-hwang entered the country with his army, and took possession of it. The "Wu-ting-kwan" received its name from the five delegates, in commemoration of the event.

portion with loess, descends from it to the Wei Basin. The waters rush down in cascades through short gullies, cut deep into the rocks, and originating from the confluence of still wilder and more rocky gorges. To the south, long rivers with gradual descent flow towards the Han. Yet the difficulties of road-making were not on the northern slope, but on the southern side, and they increase steadily with the approach to the Han valley; for, the rivers on that side break through gorges and narrows more wild and rocky than those on the north. The mountains do not, as might be expected, gradually decrease in altitude with the increasing distance from the main range, but keep steadily at from 6,000 to 9,000 feet, and then cease precipitously. The further south, the harder are the rocks, the deeper are they eroded by the rivers, the bolder and more ragged is the scenery.

The Tsing-ling-shan is made up of several parallel belts, which are distinguished from each other by the nature of the rocks of which they are composed, and by the character of the surface. A granite belt constitutes the northern descent and the range of highest summits, which have a gently rounded shape. Between them the *Tien-cha-ling* pass is immersed, which is about 3,500 feet high above the Wei River, and 6,000 feet above the level of the sea, and divides the waters of the Yellow River from those flowing towards the Yangtse. The rivulet which the road follows now downward to the city of Fung-hien, for 145 *li*, belongs to the head-waters of the Kia-ling-kiang, which empties as a large stream into the Yangtse, at Chung-king-fu. Gentle depressions are immersed in the granitic belt, south of the summit range and little below the pass; they exhibit the last cover of loess which is encountered in going south, and are well cultivated and inhabited. The second belt consists of a series of very ancient green shists which, from their occurrence on the Wu-tai-shan, I have called the *Wutai shists*. It is over 20 miles wide. The river flows across the strike of the strata, and breaks through them in an angular course, in which some very narrow places occur. Where the road passes these gorges, it winds around the foot of the precipices, and is in several places walled up, or where that could not be done, made of vertical poles fastened in the rocks and covered with planks. The shists are unconformably overlain by strata of Silurian age which are in an almost unmetamorphosed state and distinguished by the occurrence of a bed of coal which is mined in many places. This third belt is composed of several parallel bands, in which thick masses of limestone alternate with more destructible rocks, those constituting rugged crests, while these give origin to gentle depressions between them. The rivers break through the limestone in narrow gorges, some of which leave no room at all for a road. For this reason, the highroad leaves, at the city of Fung-hien, the river which it had followed till there, and, over passes exceeding the Tien cha-ling in altitude, winds up and down, until it reaches the waters of the He-lung-kiang, a mountain-torrent on the side of which it descends to the valley of Han-chung-fu. Where the river is first met by the road, it breaks through the most rugged range of all which make up the Tsing-ling-shan. It constitutes a long and straight line of wild and picturesque summits known as the *Tsz'-pai-shan*. With it begins the fourth belt. It consists of the same Silurian strata which compose the third; but they are here intersected by masses of granite and other eruptive rocks, which have changed the limestone to marble, and hardened and altered the other rocks in various ways. This whole belt is a perfect sea of rugged summits and crests. The He-lung-kiang (or, properly, an affluent of it) descends through it in a deep chasm. The scenery is romantic and very wild. The road keeps close to the torrent and is frequently hewn out in the rocks. In one place the hills recede, so as to form a narrow basin. Here stands, on granite rocks, the fort and city of *Liu-pa-ting*, now almost deserted, but still surrounded with fine and well preserved walls. Finally, the fifth and largest belt is reached. Here the Silurian strata are interwoven with a close network of small granite-veins, and converted into michashiste, gneiss, marble, and quartzite. These rocks continue to Pau-ching-hien. As all of them excel by their hardness, the scenery becomes bold and grand, the mountains have massive forms and tower up to 7,000 and 8,000 feet. The difficulties which the construction of the road had to overcome increase. In the gloomy gorge of the He lung-kiang the trail goes up and down steep rocks, until the river enters a deep crevice enclosed between vertical walls. The road climbs in serpentines to the top of the wall which constitutes the bank on the right hand side. Here stands a gate and temple known as the *Ki-tau-kwan*, which marks the end of the difficulties and perils of the road across the Tsing-ling-shan. A beautiful view presents itself. At the foot of a gentle and grassy slope lies the town of Pau-ching-hien, beyond it the valley at Han-chung-fu, bounded on the other side by the first hills of the Ta-pa-shan.

Among the distinctive features of the Tsing-ling-shan are, its composition of regular and parallel belts, and the absence of longitudinal valleys. There are none of these along the road, and, to judge from Chinese

maps, the entire mountain-range is deficient of them. All the larger rivers descend at right angles to the strike, and only small affluents share in the general direction of the rocks. In consequence, the broad range is a labyrinth of mountains, with very little ground fit for cultivation between them. It is full of game, but in few places only adapted for the habitation of man, and yields almost no produce of value. With the exception of some small coal-mines, which will never supply any region beyond their nearest surroundings, and a few iron-mines, I know of no place in the whole range where minerals or metals are extracted. The rearing of the wild silkworm might be attended with profits, if it were tried; but it has not been introduced.

There are other trails crossing the Tsing-ling-shan, both west and east of this highroad. One of them, which shortens the distance between Si-ngan-fu and Han-chung-fu by four days, is used by coolies carrying freight, but is said to be nearly impassable in winter.

3*rd.*—*Valley of Han-chung-fu.*—The valley of the upper Han is considered by the people of Northern Shensi as an earthly paradise. The plentiful growth of evergreen shrubs and trees, wild bamboo, orange-trees, palm-trees, mulberry-trees, is sufficient indication of its warm climate. The Tsing-ling-shan, which rises abruptly to summits of 6,000 feet, keeps off the northerly winds, while the Ta-pa-shan, on the south side, commences with gentle and partly well-wooded hills, between which long rivers descend, with here and there some cultivated valley-ground on their banks. Although the Tai-ping's have killed more than one half of the inhabitants, the valley of Han-chung-fu is still very populous, and contains many towns and villages crowded with people. I could not ascertain its extent. At Han-chung the width of the valley appears to be about twenty miles from north to south. But immediately west of the city it contracts to no more than seven miles. It continues nearly thirty miles in that direction, and closes abruptly at the destroyed city of Mien-hien. There, the two enclosing ranges meet, to form to the west a broad mountainous region which is difficult to penetrate. The road goes directly from Pau-ching-hien to Mien-hien, without touching Han-chung-fu.

The valley produces wheat, cotton, tobacco, silk, and many other crops. Besides them, the manufacture of carpenter's *glue* in the district of Si-hiang deserves some notice. There are places in China that monopolize the manufacture of certain articles, which, although not considered of much importance in trade, attain some magnitude when one small region supplies with them the population of many provinces. Of that nature is the manufacture of glue in Si-hiang; probably one half of China is provided from there with that necessary article. On the road from Tai-yuen to Han-chung-fu, it never ceased to be conspicuous among the articles of carrying-trade. The fact that the place, by furnishing a superior article, defies competition, is said to be due to the occurrence of a plant, the bulbs of which are, besides the commonly applied substances, used in boiling the pig-skins which are to be converted into glue. Another industry of the country is the manufacture of *steel*. It is made in several places. The most celebrated among them is Tiè-lu-chwang on the Kiu-sui River, which empties into the Han below Sin-pu-wan. The place is situated 300 *li* up the river, in the Tsz'-pai-shan mountains. Several hundred soldiers are stationed there, on account of the turbulent character of the numerous population at the steel-works.

4*th.*—*The Ta-pa-shan* or *Kiu-tiao-shan**—In a west-south-westerly direction from Mien-hien a perfectly straight canal is immersed between the mountains. The Han, descends in it, filling just its bottom. This long river is navigable to the mart of *Sin-pu-wan*, 50 *li* above Mien-hien, and only a few miles distant from its source.†

* On foreign maps, this range has the name "Ta-pa-ling." As it is one of the chief mountainranges in China, I was desirous of tracing the origin of the name. I found that it is not known to the natives, and originated probably in the name of a pass between Pa-chau in Sz'-chwan and Si-hiang-hien in Shensi; Chinese maps designate this pass as "Pa-ling," and one of the prominent summits in the neighbourhood as "Ta-pa-shan." A comprehensive and appropriate name is however generally used by the natives in the adjoining regions. They call those mountains the "Kiu-tiao-shan," that is, "the nine mountainridges," designating therewith the fact that the range is made up of a number of parallel ridges. This name should be retained in preference of the other.

† The distances on the Han-river are given by the skippers as follows:—

From Sin-pu-wan to Tsz'-yang-hien	1,200 *li*.
,, Tsz'-yang-hien to Lao-ho-kou	1,200 ,,
,, Lao-ho-kou to Fan-ching	150 ,,
,, Fan-ching to Hankau	1,240 ,,
Total navigable length of river	3,790 *li*.

I did not ascertain the length of the *li* as applied in this case. But the total distance is probably more than that from Shanghai to I-chang-fu, on the Yang-tsze. In the first 1,200 *li*, rapids are frequent and dangerous, the boats are therefore very small. At Tsz'-yang-hien the goods are transhipped to somewhat larger boats, and a second transhipment to the ordinary boats of the Han-river is made at Lao-ho-kou. Freight from Sin-pu-wan to Lao-ho-kou is 2,000 cash per *tan* of 120 catties. Travellers going east take the water-route; going west, they go usually by land. The road-distance from Lao-ho-kou to Tsz'yang-hien is considered as 720 *li*, and from there to Sin-pu-wan the same.

Goods coming up the river leave here the boats and are carried 125 *li* by land to the mart *Yang-ping-kwan* on the Kia-ling-kiang, whence they descend to Pau-ning-fu and Chung-king-fu in Sz'chwan. The high-road reaches that river lower down, after crossing a complicated defile.

The Ta-pa-shan, in which lies the watershed between the Kia-ling-kiang and the Han-kiang, is a mountainrange of a peculiar character. It is not possible to say where it commences and where it terminates, nor can the limits of its slopes be approximately defined from what we know in regard to it. Its direction is given, on maps, as east-south-east; but its north-western end, that which is crossed by the highroad, is made up of numerous parallel ridges which strike W. 20° S.—E. 20° N. The rocks which compose it are Silurian strata, bent up in several folds, which give origin to the ridges. Limestone-beds, some of which are over a thousand feet thick, alternate with argillite and sand-stone. The rocks are filled with an amazing amount of well-preserved fossils. The region between Ning-kiang-chau and Chau-tien is the richest locality of fossils of any kind or age which I found in China. Some mountains are literally made up of them. The Ta-pa-shan is in altitude much below the Tsing-ling-shan, but it is so deeply eroded, the limestone forms so bold crests, and the rivers break through these in so deep and narrow gorges, that it would be an efficient barrier to intercommunication, if the highroad were not built with care across it, and if the head of navigation of the Han-river were not so close to that of the Kia-ling-kiang. The scenery in the Ta-pa-shan is of great beauty and diversity. Small villages are nestled between the rocks, and some ground is cultivated; but the area of wilderness prevails, and the population is very thin. The Kia-ling-kiang flows through gloomy gorges with perfectly vertical limestone-walls. Where it emerges from these narrows, it intersects a belt of coal-formation, a few miles north of Kwang-yuen-hien, and with this ends the passage through the Ta-pa-shan. The strata follow still the strike of the ridges which compose that range (W. 20° S.), but dip away from it, towards the interior of Sz'-chwan. These coalmeasures form a long but narrow belt and give origin to considerable coal-mining in many places. From the mines near Kwang-yuen the coal is carried down the Kia-ling-kiang.

5th.—Through the Red Basin of Sz'chwan.—Although the boundary of Sz'chwan is crossed in the Tapa mountains, the true character which distinguishes this province commences only at Kwang-yuen-hien. The road from here to Ching-tu-fu is replete with interest. But as it would be impossible to do it justice without going into many details, I refrain from its description at the present occasion. * It is a hilly region throughout, till the plain of Ching-tu-fu is reached. As regards the nature of the country, my observations on the road shall be embodied in the following chapters, together with such information as I was able to gather from the natives in respect to the rest of the province.

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* A full and interesting account of the journey between Ching-tu-fu and Han-chung-fu is given by Mr. Alex. Wylie in his "Notes of a Journey from Chingtoo to Hankow." (Proceedings Roy. Geograph. Soc., London. XIV. (1870) p. 168.)

PROVINCE OF SZ'-CHWAN.

1.—*GENERAL CONFIGURATION.*

Sz'-chwan is the largest of the eighteen provinces of China. It comprises a territory of about 167,000 geographical or 220,000 statute square miles, which is nearly one third of the basin of the Yangtse. The western half of this area (about 120,000 square miles) forms part of the great mountain-lands of Central Asia, and, with the exception of some small enclosures, is little populated, almost uncultivated, and of inferior importance as regards the value of its products; while the eastern portion (about 100,000 square miles) is among the richest and most productive regions in China. This portion only is the proper "Four stream-land" (which is the meaning of the word Sz'-chwan), the western half having been gradually annexed since the time of Kanghi. On another page I will give a few notes regarding these mountainous regions in the west, and confine myself here to the eastern half of the province.

Eastern Sz'-chwan may be described as a large triangular-shaped basin surrounded by mountains, some of which rise above the snow-line, and all of which are difficult to cross. They are made up, in the main, of very ancient formations, mostly of Silurian and Devonian age. The basin is filled with sediments of subsequent origin. Among those of them which take part in the formation of the surface, two only are of practical interest, viz., a coalformation of little thickness, and an accumulation of red clayey sandstones and sandy clays of enormous stratigraphical development. As these rocks predominate largely, and impart their characteristic brick-red colour to the surface where it is exposed, the term of "*the Red Basin*" may not inappropriately be applied to almost the whole area of Eastern Sz'chwan. The summitlines within the basin are nearly at a level with each other, and would, if connected, represent an undulating plane elevated, throughout its greater portion, from 3,000 to 4,000 feet above the level of the sea. But owing to the fact, that the beds of the Yang-tse and its navigable affluents, by which the province is drained, are situated at 1,500 to 2,500 feet below the level of the plane, and that most of the rocks composing the Red Basin are soft and easily destructible, the rivers with all their widespread tributaries, down to the smallest brooks, have eroded deep channels, and converted the entire basin into a thoroughly hilly country. Besides the plain of Ching-tu-fu, Sz'-chwan does not contain more than narrow patches of level ground, and these are scarce and far between.

Neither the configuration nor the geological structure of Eastern Sz'-chwan are, however, quite so simple as might be inferred from this description. Although a basin did certainly exist already during the deposition of the red sandstones, and these are, in extensive areas, in a state of undisturbed stratification, yet the mountainous regions which surround the Red Basin owe their elevation, in part, to subsequent disturbances, which have greatly affected the red sandstones themselves, and have influenced, not only the configuration of the surface, but also the productive power of the province. There are, within the limits of the Red Basin, a number of linear elevations, in which the underlying limestone is bent up from great depth, so as to form, in each case, an axial core, lined on either side by highly inclined strata, among which there is ordinarily noticeable, next to the axis, a double belt of coal-formation, followed on either side by strata of red sandstone standing on edge. In the southeastern portion of the basin these linear elevations range in close succession. The Yangtse breaks through them, and exhibits beautifully their structure. The majority of them have a S W. —N E. trend. The space between every two ranges is occupied by horizontal strata. In these, the bed of the river is deeply immersed, from the place where it emerges from one rocky passage to that where it enters the next. Above Chung-king-fu, there are only a few of these passages, and they are very short. The scenery on the river is there extremely lovely. Below that city, the grander chasms commence, and below Kwei-chau-fu there are wild gorges of great length, well known from all existing descriptions of that portion of the river.

Although my personal observations are necessarily limited, I collected sufficient additional information to enable me to define approximately the limits of the Red Basin. For the purposes of this letter it will answer to describe their general direction. The southeastern boundary is a nearly straight line, starting from *Kwei-chau-fu*, and passing by *Ki-kiang-hien* (south of Chung-king-fu), *Jin-hwai-hien* (south of Lu-chau) to *Yung-ning-hien* (south-east of Sü-chau-fu), thence returning to the Yangtse at *Ping-shan-hien*. To the west, the basin is limited by a line connecting *Ping-shan* with *Ya-chau-fu*, and prolongated from there through *Kwan-hien* to *Lung-ngan-fu*. The north-eastern boundary is much more intricate, and the least known to me. The direct connection of *Lung-ngan-fu* with *Kwei-chau-fu* is, however, a rough approximation to it.

Within this triangle there is life, industry, prosperity, wealth, intercommunication by water. Outside of it, as a rule, no river is navigable, with the exception of the Yangtse where it leaves the basin. To the south and west commence immediately territories occupied by *I-jin* or "barbarians," and in every direction we ascend from the elevated region of the Red Basin into the rugged mountainous countries which surround it. From the basin is derived that large and valuable produce which has justly attracted attention of late years. Outside of it, on all sides, the country is thinly inhabited and little productive.

2.—*MEANS OF INTERCOMMUNICATION.*

The *Yangtse* flows through the Red Basin in the line of its greatest extent. The head of navigation, at Ping-shan-hien,* is situated, at the same time, at the confines of the basin. From there to Chung-king-fu, and as far down as Fu-chau, the river is navigated throughout the year with comparative ease. Below that place, and more particularly below Kwei-chau-fu, navigation is suspended during one or two months in summer. All the affluents on the right bank of the river, below Ping-shan, can be navigated by small boats as far as the limits of the Red Basin extend, which is a short distance in each case. Only on the *Kien-kiang*, which empties at Fu-chau, the Chinese manage to drag their boats over a series of wild rapids to some distance beyond those limits. On the left bank, the Yangtse is joined by three large rivers, the *Min-kiang*, the *To-kiang*, and the *Kia-ling-kiang*. Where they join the Yangtse, are situated, respectively, the great commercial cities of Sü-chau-fu, Lu-chau, and Chung-king-fu. They and their chief tributaries are navigable to the limits of the basin; some of them not quite so far, others a little way beyond. All rivers of Sz'chwan have a strong current, even at low water, and are beset with rapids. Downstream, vessels travel at a quick rate; upstream they are dragged slowly and at great expense. Either way more hands are required than is usually the case in Chinese waters. Transportation by boat is therefore more expensive in Sz'-chwan than in other provinces. The expense of freight increases with the distance from the great rivers. No one artificial canal for navigation exists in the province, the country being totally unfit for their construction, and no embankment (with some local exceptions scarcely worth noticing) is constructed in Sz'-chwan, because none is needed.

Communication by land is difficult everywhere, with the exception of the plain of Ching-tu-fu. The Peking road or *Ta-pè-lu* is the greatest high-road in the country. Another much travelled road connects Ching-tu-fu with Chung-king-fu, by way of Tsz-chau; a third goes from Ching-tu-fu to Tung-chwan-fu and Pau-ning-fu; another to Ya-chau-fu, where the roads to Tibet and Ning-yuen-fu commence. There is also a road connecting Chung-king-fu with Kwei-chau-fu, and proceeding thence to I-chang-fu in Hupè. Valuable merchandize is transported on it, to avoid the dangers of the rapids of the Yangtse. All these highroads, to which should be added a few others, are well paved with flagstones, wide enough for two packtrains to pass each other, and kept in excellent repair. But little care is bestowed upon the grading. At steep places, flights of stairs are made, sometimes of a few hundred steps at a time, with little interruption. The ease with which the ponies of the country climb and descend such places in quickstep is astonishing, and the mules travel on them with a sure pace. But, in general, animals are not much employed in Sz'-chwan. Usually, travellers go in chairs, and the transportation of goods is done by coolies. Away from the high-roads, these are the only modes of traffic. An infinite number of foot-paths permeate the country; and there is probably no hilly region in China so well provided with them. They, too, are paved and constructed with

* Although Ping-shan-hien is, practically, the head of navigation, small boats proceed much higher up the river. But some rapids are so strong that no boat can pass them. Travellers in arriving at such a place must proceed by land for some distance, and take other boats above it.

care. The system of watercourses in Sz'-chwan is so complicated, that no road can be constructed that must not repeatedly cross brooks and rivers. Ferries are in use in those places only where the expense of building a bridge would not be commensurate with the amount of traffic going over it; otherwise a bridge does certainly exist. In regard to the number, and the architectural beauty and perfection of these, Sz'-chwan is undoubtedly a-head of all the other provinces, Kiangsu and Chekiang not excepted It appears indeed, that the possession of a fine and well constructed bridge is a matter of pride for any place that is in need of one. It is another distinguishing feature of Sz'-chwan, that every one of them is in perfect repair; they are built of cutstone, the red sandstone giving an excellent material for monumental architecture. The pillars are either connected by arches, or covered with horizontal slabs of stone, so as to afford a level road. I have seen, on several occasions, blocks 24 feet long, 4 feet wide, and 2 feet thick, employed for that purpose. In the wilderness of western Sz'-chwan it often happens that a road must traverse a narrow chasm between rocks, where deep below the water descends in foaming cascades. Then the chasm is spanned with five or six strong iron chains lying parallel to each other. They are covered transversely with stout planks. Other chains form a sort of railing on both sides. These bridges are frequent in the West. They are perfectly safe, even for pack-animals, provided that these are guided over singly. In other places of a similar character, where a passage for man only is required, wire-bridges of an exceedingly elegant pattern are constructed. In rocky dens filled with huge granite boulders, between which grows a luxurious vegetation, these delicate structures are a surprisingly decorative element.

The cost of transportation by land, in Sz'-chwan, is generally equal to the ordinary price paid where the carriage is done by coolies, namely from $4\frac{1}{2}$ to 6 cash a picul per *li*. On some great roads, where a regular trade is established, the cost is lower. I shall have to mention some notable exceptions on the road to Tibet. In hiring coolies for the distance, the regular price is 250 to 300 cash a day for baggage coolies, and double that amount for chair bearers.

As regards the means of intercommunication between Eastern and Western Sz'-chwan, as well as between both and the neighbouring provinces, I shall have occasion to describe them in subsequent chapters.

3.—*POPULATION.*

Among the inhabitants of the eighteen provinces, the people of Sz'-chwan are (according to my own experience with them) the most gentle and amiable in character, and the most refined in manners. They are also more cleanly and orderly in dress and habits than the Chinese in general. Although somewhat prejudiced against foreigners by stories spread among them, they give evidence by their behaviour, that they are not hasty and superficial in forming an opinion, and desire to improve it by personal acquaintance. Like the people of Shansi, they arrive at the conviction, that men who have attained a high rank in industrial arts must have merit. They meet us with civility and respect, are not in the least shy, and, without evincing that rude curiosity so repulsive to us in many other places, they answer frankly and without hesitation any question put to them. It is no hazard, that the zeal of the early missionaries has left in Sz'-chwan a far more numerous community of catholic christians than in any other province. Wherever I arrived at a place where there lived some of them, they would come and confess frankly their faith before any assembled crowd. I got the impression, that they are true and devoted christians, but that, besides the religion, they have a profound veneration of every thing connected with Europe. Also in regard to the pagan population, I arrived at the conviction that they would like dealings with foreigners, more so than the people of any other provinces, and soon become our devoted friends. Not only in Chung-king-fu, but also in remoter districts, they would be satisfied to see direct commercial intercourse with foreigners established.

The occupations of the poeple of Sz'-chwan are: agriculture, industrial pursuits, small trade, and navigation. They love money, but are deficient in commercial spirit. All the great commerce, throughout the country, in cotton, silk, salt, opium, and white wax, is in the hands of men from Shensi and Kiangsi; and those from Shansi are bankers and pawnbrokers. In the military career, they have never earned a high reputation, nor are many to be found in the lists of the high mandarins. Yet, they appear to range, on an average, with the most intelligent portions of the population of the eighteen provinces, and are not lacking in mental accomplishment. Perhaps their good common sense keeps them from putting too much value on Chinese book-learning.

All those distinctive qualities of the people of Sz'-chwan are surprising, if the manner is considered in which the province has been populated. It appears that, under Tsin-chi-hwang, in the third century before our era, Chinese elements first settled in it. The successful usurper Liu-pi, who reigned at Ching-tu-fu, contributed, nearly 500 years later, to extend the range of country inhabited by the Chinese. He founded Chinese colonies and cities in Kwei-chau and Yünnan. Under Kublai-khan, however, the then existing population was nearly exterminated. In Ching-tu-fu alone, hundreds of thousands are said to have been killed. A general immigration from the adjoining provinces then took place, and Sz'chwan grew, during the reign of the Ming-dynasty, again into a flourishing state. Then only the aboriginal inhabitants were driven back from some portions of the Red Basin, which they had still occupied, and the whole of Eastern Sz'chwan was peopled with Chinese. But on the accession of the Manchu dynasty, a terrible devastation of the province took again place, and the population was nearly exterminated. Again the city of Ching-tu-fu was the greatest sufferer; it is said to have been destroyed to a great extent. The consequence was, as on the previous occasion, a considerable immigration, chiefly from Shensi and Hupè, but also from Hunan, Kiangnan, Fokien, Kwangtung, Honan, and other provinces. The present population of Sz'chwan has its origin in this mixture of elements, and yet has succeeded to attain an independent and individual character, in which the more favourable qualities of their various parent stocks appear to have been pre-eminently preserved. The inhabitants like their country, and are proud of it. Very few of them are to be found in other provinces.

The number of the population, according to the census of 1812, is given at nearly 22 millions, but is said to have increased to 35 millions. If the first figure was correct, the second is probably no over-estimation, because the people marry very young and have lately not been visited by any great depopulating scourge. It appears, however, that the limit at which the population is well off with its present occupations is near being transgressed. The inhabitants are evidently in a state of general prosperity. In the cities and in the country there is a certain luxury in dress and habitations, in Sz'chwan as compared with other provinces. But although the aggregate wealth may exceed that of most of them, it is only just to add, that it appears to be more evenly distributed, and, therefore, more conspicuous, and that the number of individuals eminent by large accumulated wealth is small. Unfortunately, the same cannot be said of the other extreme. Beggars are numerous, and becoming more frequent every year. This is true, quite independently from their alarming accumulation during the present famine. If the government would take measures to assist people in emigrating to Shensi and Kiangnan, it is probable that Sz'chwan would soon give back to those provinces in numbers of individuals more than it did formerly receive from them.

In no other province of China is there such a sharp distinction between Country and City as is the case in Sz'chwan. Chinese like crowding, the tighter the better. They congregate in cities and villages, but dislike to live alone. The difference of villages and cities is generally more in size than in character, and the smallest hamlet has a tinge of the city. In Sz'chwan, the country is dotted everywhere with farms or small groups of them. There the farmer lives, with his numerous family, in the midst of his fields. Those who are given to industrial pursuits or commerce live in market-towns or cities, but the Chinese type of townlike villages is little represented. The city is thoroughly city, and the country is thoroughly country. People can live in this state of separation and isolation only where they expect peace; and profound peace is indeed the impression which Sz'chwan prominently conveys.

If the rate at which a people has contrived to develope to its fullest capacity the productive power of the soil on which it lives is taken as a measure by which to estimate its position in the scale of industrial accomplishment, the palm, among all provinces of China, is probably due to Sz'chwan; nothing speaks more forcibly in favour of the practical intellect of its inhabitants, than the fact that they have succeeded in adapting the products to soil and climate with admirable ingennity. There are some districts of limited extent in other provinces where this is the case in at least the same measure, but it cannot be said of any other region approaching at all in size the Red Basin.

4.—*PRODUCTS OF SZ'CHWAN.*

While the northern provinces produce not only no noteworthy article for foreign export, but are also deficient in those which, through their diffusion through the rest of China, exert an indirect influence on foreign commerce, we have arrived, in Sz'chwan, at a region abounding in products which are valuable in

both respects. Some of them will in the course of time attain, probably, a prominent position among the articles of export to foreign countries, and there are few provinces of China with which Sz'chwan does not entertain a lively exchange of products.

The Chamber is in possession of so full and valuable information on this subject, through the report of its delegates to the Upper Yangtse, and this document is written with such consummate knowledge of the practical bearings of the questions which are here concerned, that I must fear to appear presumptive if I attempt to add a few words to its contents. Wherever I made enquiries into the kind, or range of distribution, or money-value, of the chief products of the province, I found the statements made there confirmed. I shall have to note a few immaterial exceptions. In some cases it may be of interest to learn the fluctuations of the prices, or a few particulars concerning the mode of distribution of some products, and other subordinate subjects.

Silk.—As regards the quantity of silk produced, Sz'chwan is probably second to no other province; but in respect to quality, the inhabitants agree that their own product is inferior to that from Chekiang, as regards softness, gloss, and elegant appearance; its strength and durability allow it, however, to compete successfully with the other at some markets where the silk from both provinces is sold, chiefly in the north. The production of silk is limited to the Red Basin. There are few departments in it that yield no silk at all. But the most prolific regions are in the north and west. In the five departments of Pau-ning-fu, Shun-king-fu, Tung-chwan-fu, Ching-tu-fu, Mien-chau, silk is made in 35 out of 46 *chau* and *hien* districts. To these must be added important districts in Ya-chau-fu, Mei-chau, Kia-ting-fu and Tsz-chau. It will be observed, that this list does not contain the name of any department on the Yangtse. Silk is made in every-one of them, but does not constitute an article of other than local trade. It is difficult to arrive at reliable statements concerning the relative value of the silk from different districts. The most expensive kinds are, very fine white and yellow silks made in the northernmost districts, chiefly Tsz'tung-hien, Kien-chau, (both of Pau-ning-fu), and Mien-chau. The best kinds of Jin-shau-hien (in Tsz'chau) are considered to range with them. With these exceptions, to which must probably be added a few others, all the silks of commerce vary in price within a small range from a certain standard, which fluctuates from year to year, and also in the different seasons. It is said to have doubled in the last ten years. This standard is, the average price of those kinds of the silk of commerce, of which the greatest bulk is exported. The differences in colour, gloss, bleaching, fineness, and evenness give rise to variations of the price above and below the standard, which are specially agreed upon between seller and buyer. In Ching-tu-fu, this standard was, in last spring, Tls. 21.7 per *pa** of 160 Taels; in Chung-king-fu, for the western sorts, Tls. 22.0, which is equal to Tls. 217 and 220 per picul.† Pau-ning-fu sorts are in general coarser and cheaper. Kia-ting-fu is one of the most celebrated localities for white silk, although not for the finest kinds of it. It is at once made up into silk piece-goods, which are sold at Tls. 2.9 to 3.8 per catty of 16 taels. They are much esteemed on account of their superior manufacture and durability, and form a considerable article of trade within the province itself, as well as with Peking and Tibet.

The consumption of silk in the cities of Sz'chwan is extraordinarily large. At New-year's time half the population of Ching-tu-fu was dressed in silk. The exports must reach a very high figure. Much silk goes north, to Shensi, Shansi, Kansu, and Peking. Of the western regions, Tibet is the chief customer. The trade to Yünnan has much diminished, but is still considerable, because that province produces no silk. It

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* Silk is sold, in Sz'chwan, by the *pa*, which weighs 80, 120, 160, or 200 taels, according to the kind of silk and the locality whence it comes; and by the *pau*, which weighs 50 catties.

† It is very difficult to arrive at the truth regarding the prices of silk, beyond this standard, which is known to everybody. The trade of Sz'chwan, with all its branches, from the purchase of the silk at the places of production, and its collecting at Chung-king-fu, to its disposal at Hankow, Siangtan, Shanghai, and other places of destination, is in the hands of merchants from Kiangsi (and a few from Shensi.) All commerce of Sz'chwan which is managed by Kiangsi men, is distinguished by a code of curious and intricate conventionalities, expressed, as it were, in a language of cyphers. A "catty" of silk and a "catty" of white wax, for instance, may be two different weights; a "catty" of tobacco from one place of production may be smaller than a "catty" of it from another place, and a "catty" of white wax at the place of production vary from that by which the same article is sold at Chung-king-fu. These conventional weights are quite irrespective of the weights used in general commerce at each separate place. Similar conventionalities exist in regard to the price. A "Tael" of silver may, in speaking of the price of silk from a certain locality mean nine mace, and, in speaking of opium, something more or less. There are other usages concerning certain allowances. It appears that every hong, though conversant with this code of cyphers as far as it regards its own branch of commerce, is not in possession of the generality of them. As regards the trade in silk, each silk hong in Chung-king-fu deals in the product from one or several distinct producing districts, of which it has a kind of monopoly; and it is not certain whether any separate individual is conversant with all the branches of the silk-trade.

was among the chief articles of trade on the old road from Ching-tu-fu to Ta-li-fu, and found its way from there beyond the Chinese frontiers, to Burma and other countries. Kwei-chau, Kwangsi, Hunan, and Hupè receive much silk from Sz'-chwan. Till of late, little went beyond those limits. But it commences to compete with the silk from Chekiang in the maritime provinces and in the foreign market.* The readiness with which some manufacturers in Sz'-chwan have changed the reel, in order to make the silk adapted for foreign commerce, speaks favourably of their spirit of industrial enterprise.

Opium.—The cultivation of the poppy is very generally diffused throughout Eastern Sz'-chwan. But it has probably attained its highest limit. It is nowhere so conspicuous as between Chung-chau and Fu-chau on the Yangtse, where it occupies probably one third of all cultivated sloping ground. The country thereabouts is mountainous and wild, thinly inhabited, and not fertile. The more favourable the conditions for agriculture, and the more fertile the ground, the smaller is the ratio in which the poppy is planted. Quite unlike the mode of its cultivation in the North, it is rarely seen on level ground, such as the plain of Ching-tu-fu, or the rich bottomland near Kia-ting-fu. The reason is this, that wheat is there more remunerative. In the hills, there are two kinds of fields, those which are made level by artificial terracing, and those which participate in the inclination of the slopes. The first are favourable for wheat, and therefore little used for the poppy. On sloping ground, the crops of wheat are less prolific and more uncertain; it is these fields on which the poppy is chiefly planted, because it is a sure crop and more advantageous than wheat, in a pecuniary way. The profits derived from its cultivation are, however, not large, even on that kind of ground. In the East, the farmer gets a better price for his opium than in the West, and this slight difference in the profits is probably the reason why the poppy is planted much more extensively below than above Chungking. From the extent of my own observations, I estimated, that the poppy does not occupy one-fiftieth part of the arable land of Eastern Sz'-chwan; and the ratio is reduced to less than one-hundredth, if it is considered that it occupies the fields only during one half of the year (from November to May), and to still less if the ground is put down, acre by acre, at its relative value.

The growing of the poppy, considered from an economical point of view, does probably no more harm, in Sz'-chwan and Yünnan, than the planting of tobacco. It has given origin to a valuable article of export, and to a source of revenue derived from ground which would be otherwise of little use. Under the present circumstances, it must be considered as a blessing to the country, that the opium is of inferior quality. In the first place, people who would be otherwise induced to use a strong and high-priced opium, are provided with a weak drug and at a low price. In no other province, with the exception of Hunan, did I find the effects of the use of opium so little perceptible as in Sz'-chwan, among the lower classes, probably because the weakness of the drug diminishes its deleterious effects upon the constitution. Then, if it were of a better quality and paid for as high as the opium from Shensi, the poppy would at once drive from the fields those crops which are essential for the sustenance of the people, and cause immense suffering and, probably, a reduction of the number of the population.†

It is for the same reasons that it is probable, that the cultivation of the poppy has attained its highest limit. Since several years, no impediment has been put upon it, and experience has now fairly shown where the poppy can compete most favourably with other crops. While certain places were found too good for it, it did not thrive at all under certain other conditions. It occupies now probably that portion of the ground which is most adapted for its profitable growth. Besides, the produce of Shensi had much decreased for a number of years, during its occupation by the Mahomedans. That province and Shansi were therefore supplied, to a considerable extent, from Sz'-chwan. Henceforth Shensi will provide its own wants, and supply Shansi. Yünnan may, too, become before long a more dangerous competitor in the production of opium than it is now. On the other hand, however, the government may, at some time or other, remove, or reduce, the very heavy restrictions put on the free circulation of native opium. If then

* While until lately Sz'-chwan silk did not at all appear among the foreign exports, I am informed that 6,000 bales of it left Shanghai in 1871, for foreign countries.

† In explanation of this remark, which may appear to contradict the ordinary laws of political economy, it must be observed, that Sz'-chwan is unfortunately situated, as regards the making up of a deficiency in the quantity of food by importation from abroad. The freight on rice and wheat from Hupè or Hunan to various places in Sz'-chwan would, according to their distance from Chung-king-fu, amount to between one and three times the prime cost of those articles in ordinary years. Besides, from the time a famine is really felt in Sz'-chwan, it would require from three to six months to provide various portions of the province with imported grain, even if a sufficient number of boats were immediately on hand, and the whole required stock of grain lay ready for shipment at Sha-sz' and Chang-te-fu.

Sz'-chwan opium should be able to command at Hankau its present price, the consequence would be, a larger price paid to the grower, and an immediate increase of the area planted with the poppy.*

Around Ching-tu-fu, the hong-price of opium in the cities is, at the time of its collection, Tls. 9 to 10 per 100 taels; it rises in spring to Tls. 12 and 12.5. At Sü-chau-fu, it is nearly the same, but rises to Tls. 13 in spring. Near Fu chau on the Yangtse, below Chung-king-fu, the opium was being collected when I passed through the country in April. The growers sold it at 180 to 200 cash per tael, or Tls. 10.6 to 11.8 per 100 taels. The hong-price in the cities was Tls. 15 to 16. Much of the opium of that region is shipped to Hankau. The duties between Fu-chau and Hankau are no more than 22 cash per tael.

White-wax (Pe-lă).—This is a valuable and very interesting product of Sz'-chwan. It is largely consumed in the country, and much of it is exported to other provinces. The white wax of commerce is made exclusively in the department of Kia-ting-fu, near the western border of the Red Basin. Sz'-chwan people know that it is also made in Shantung, Chekiang, and Fokien, but speak with contempt of the inferiority of the wax of those provinces. According to my information, none is made in Kwei-chau and Yünnan, or in any of the northern provinces.

The department of Kia-ting-fu is a region where much level ground spreads between gentle hills, and bears therefore an exceptional character in a country so uniformly hilly as Sz'-chwan. Its climate is warmer than that of the plain of Ching-tu-fu, but not so warm as that of the *valley of Ning-yuen-fu*, which is better known as the *region of Kien-chang*, and highly reputed for its beauty of scenery. With admirable sagacity the Chinese have found out, that the breeding of the wax-insect and the production of wax through it are two distinct processes, which cannot be combined profitably in one and the same locality, but, if judiciously separated, may lead to unexpected perfection. The regions of Kien-chang and of Kia-ting-fu divide the labours and the profits. In Kien-chang, near the cities of Ning-yuen-fu and Hwui-li-chau, the insect-tree is planted, an evergreen tree with large and pointed ovate leaves. It is so valuable that it constitutes a separate article of property distinct from the soil on which it grows. On this tree, the wax-insect lives and breeds, but secretes little wax. It is evidently under conditions best fitted for its healthy development. The wax which is made in Kien-chang is just sufficient for the small local consumption and the supply of Yünnan. At the end of April, the Kien-chang people leave their country in great numbers, each with a load of the precious eggs on his back, and travel on a very mountainous road to Kia-ting-fu, which they reach after a fortnight's arduous walking. The road is said to present then during several weeks an exceedingly lively aspect, chiefly at night-time, when they go with lanterns. The heat of the day must be avoided, because the sun would quickly hatch the eggs. These are described as a substance resembling flour, and contained in a bag of the shape and size of a pea. Three hundred of the little bags weigh one tael. They are eagerly bought up in Kia-ting-fu,

* It is difficult to estimate the amount of opium raised in Sz'-chwan within a year. In a recently published and otherwise very able work it is given as 6,000 piculs, without further commentary. The additional statement is made, that fully one-half of the best arable land of the province is planted with poppy. If 24 taels weight is taken as the product of one mow of ground, 94 square miles would be required to raise 6,000 piculs of opium, and the "best land" of the province would comprise no more than 200 square miles. It is also stated by the same author, that more than one-half of the country people and probably seven tenths of the dwellers in towns are habitual smokers. If 6,000 piculs are divided among one-half of the population as it was in 1812, each smoker would be put on the rather short allowance of less than one taels weight a year.

To arrive at a more probable calculation of the *minimum* of the present production of opium in Sz'-chwan, we may start from the following suppositions: 1st, that the amount of Yünnan-opium imported in a year to Sz'-chwan is equal to the amount of Sz'-chwan-opium exported from the province in the same length of time (the export is in reality much larger than the import); 2nd, that the population of Sz'chwan is 21,000,000 souls, and of these one-half are male individuals; that one-half of the male population are over twenty years of age, and that among these there are fifty percentum, or in all 2,600,000, of smokers; 3rd, that one man smokes, on an average, for twenty copper-cash (Tls. 0.0.125,) daily, or for Tls. 4.5.0 in a year (this is the amount smoked by coolies; the average is much higher); 4th, that the smoker purchases the opium at an average of Tls. 12.5 for 100 taels.—According to these figures, each smoker consumes 2.25 catties a year, and 2,600,000 smokers consume 60,000 piculs. This is the probable minimum. If it is considered that the population is probably larger than here assumed; that the average amount of opium consumed by a smoker in a day is more than 20 cash, in value; that the proportion of smokers is probably considerably above what I have taken for a basis; and that the exports to Siangtan, Hankau, and other places are not by any means counterbalanced by the imports from Yünnan, it will not appear improbable, that the actual amount of opium produced in Sz'-chwan is 100,000 piculs a year, representing a value of about 20 million Taels.

If 24 taels weight of opium are gained from one *mow* planted with poppy (6.66 *mow* = 1 English acre), then an area of 937 square miles is required for raising 60,000 piculs, and 1562 square miles for 100,000 piculs. It is, however, probable, that the average yield per mow is about 30 taels, or nearly two catties, and the area set apart for the poppy therefore not so large.

These figures will appear excessive, if compared with the amount of Indian opium imported every year, and consumed throughout the coast-provinces and extensive regions in the interior. But it must be borne in mind, that an individual who smokes the Sz'-chwan drug consumes more than double in weight of the quantity which is sufficient for the smoker of Indian opium.

and immediately put upon the wax-tree. This tree is said to produce no seeds at Kia-ting-fu, and to be easily multiplied by cuttings. It is not allowed to grow freely, but is kept short, as a stump six or eight feet high. The shoots grow very rapidly. In the following year they serve for harbouring the insect, and as they must then be cut off, other twigs are allowed to grow in the third year. In the fourth, wax is again made, and so on alternately, from year to year. When the egg-balls are procured, they are folded up, six or seven together, in a bag of palm-leaf. These bags are suspended on the twigs of the trees. This is all the human labour required. After a few days the insects commence coming out. They spread as a brownish film over the twigs, but do not touch the leaves. The Chinese describe them as having neither shape, nor head, nor eyes, nor feet. It is known that the insect is a species of *Coccus*. Gradually, while the insect is growing, the surface of the twigs becomes incrustated with a white substance; this is the wax. No care whatever is required. The insect has no enemy, and is not even touched by ants. In the latter half of August the twigs are cut off and boiled in water, when the wax rises to the surface. It is then melted and poured into deep pans. It cools down to a trans-lucent and highly crystalline substance. Ten taels weight of eggs produce from 2 to 3 catties of wax.

The insect produces no eggs in Kia-ting-fu. The natives believe that the climate is not warm enough. It appears, however, that the plentiful secretion of wax indicates a sort of diseased state, owing perhaps to a too luxurious food. Where the insect breeds, the secretion is much less, and the wax is of an inferior description. The wax trees are planted on fields, either on level ground, or on the lowest portions of the slopes of hills. They are very plentiful in the districts of O-mi, Kia-kiang, Hung-ya and Lŏ-shan, all of Kia-ting-fu. Every attempt to produce good wax in other regions has failed.

The price of white wax at Kia-ting-fu, in the last season, was Tls. 50 per 100 catties of 18.7 taels each,* at Chung-king-fu Tls. 55 per picul. It fluctuates much. A year ago it was Tls. 100, and it has been as high as Tls. 200. The export was, till of late, chiefly directed to Canton and Peking, but descends now, partly, the Yang-tse to Hankau. Great profits are made on it. The amount of production cannot possibly be ascertained. But it appears that, on an average, no less than two millions Taels are divided annually among the growers in Kien-chang and Kia-ting-fu, who earn this money without other troubles than the yearly procession from the former to the latter place, and without devoting to the cultivation any separate ground and any but a nominal expense.

Tobacco.—In few provinces of China does tobacco occupy so conspicuous a place among the articles of produce as in Sz'-chwan, and in no other of them, probably, is its home-comsumption so considerable. This is, because the custom prevails of smoking the leaves rolled up in the shape of cigars, which I did not meet anywhere else in China. Besides, the exportation of tabacco is very large. Sifan and Tibet are entirely provided from Sz'-chwan, Yünnan and Hunan in part, and the exportation to Hankau is, according to the "Upper Yangtse Report," estimated at 50,000 piculs annually.

It is grown in numerous places throughout the province, but the largest production is in the plain of Ching-tu-fu, and in the department of Mei-chau, south of it. The best is from *Pi-hien* (Tls. 12 per picul at Ching-tu-fu.) It is a large round leaf, thin and with fine ribs. This kind is said to grow in no other portion of Sz'-chwan. It is finely cut up and smoked in water-pipes; a good deal of it is manufactured into snuff. The second quality, in the northwest, is from *Kia-tang-hien* (Tls. 7 per picul); it is considered as the best for ordinary smoking. The third is from *Shi-fang-hien* (Tls. 6.5.0 per picul.) All these places are situated in the plain of Ching-tu-fu. The two last-named kinds are so extensively used in the western cities in the form of cigars, that probably no tobacco belonging to them goes to Chung-king-fu. I am not acquainted with the leaf raised in the eastern portion of the province. To judge from the superior flavour and strength of the three kinds of Chingtu tobacco, it appears that, if other modes of preparing the leaf could be introduced, it might be made adapted for the foreign market, more so than the weed from any other portion of China.

Common kinds of tobacco, ranging in price from Tls. 2.5 to Tls. 4 per picul, are raised in many places. *Mei-chau* excels by the quantity of its produce. It yields the bulk for exportation to Tibet.

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* Bees-wax was sold at the same time at 420 cash, or Tls. 0.2.5, per catty, but is said to be at this price much less economical for use than *pelă*.

Tea.—In every tea-house I visited in Sz'-chwan, tea "raised in the neighbourhood" was served up. It appears indeed that the tea-shrub is planted throughout the eastern half of the province. Red sandstones, similar in character to those of Sz'-chwan, and approximately corresponding with them in age, are in the eastern tea-growing provinces chosen with preference for planting tea. They prevail through eastern Sz'-chwan, and are indeed everywhere adapted to the growth of the tea-shrub. Only green tea is made, and it is of inferior quality. One locality only has the reputation of furnishing a superior product. It is the Mung-shan hill in Kiung-chau. The tea grown on it is furnished to the Emperor, and prepared for him with water taken from the Yangtse in Ngan-hwei—a beverage praised as a sort of Nectar in native poëtry. Large plantations of tea are scarce. I will mention those of Ya-chau-fu in a chapter on "Western Sz'-chwan", and add some notes regarding the Po-'rh tea when speaking of the products of Yünnan.

It is difficult to see, why eastern Sz'-chwan, being, more than Hupè or Hunan, favoured with that soil which is apparently best adapted for the growth of good tea, should yield an inferior product to that of the neighbouring provinces. It needs perhaps the introduction of other methods of preparing the leaf; but possibly the fact is caused by climatical differences.

Sugar.—Although the cane is planted in many places, the production of sugar from it is singularly limited. Its range comprises several districts on the To-river, besides one to the west of it, and a few in the neighbourhood of the place of its junction with the Yangtse. Two kinds are made:

1*st.*—*Yang-tang* or *Pe-tang.*—Most of it is manufactured in Nui-kiang-hien (of Tsz'chau), the rest in some adjoining regions belonging to Tsz'-chau and Tsz'-yang-hien. The best costs Tls. 5 at Ching-tu-fu, the second quality Tls. 4, the latter costs Tls. 3.4.0 at the place of production.

2*nd.*—*Hung-tang* or *He-tang.*—It is made in the same places, and besides, in Kien-chau (Ching-tu-fu), Kiang-ngan-hien (Lu-chau), Na-ki-hien (Lu-chau) and Yung-hien (Kia-ting-fu). The price at Ching-tu is Tls. 2 to 2.5 per picul.

Until ten years ago the price was less than one-half of what it is now. Since then it has gradually risen. The exportation is chiefly directed to Si-fan, Tibet, Yünnan (white kinds), Han-chung-fu, and Si-ngan-fu, whence it was formerly directed to Kansu, Turkistan, and Ili, as I have described in another page. I copy from the "Upper Yangtze Report," that Sz'-chwan sugar is a considerable article of import to Hankau. It is certainly astonishing to see, how large an area is supplied with this product raised in so small a portion of Sz'-chwan.

Tung-oil.—The general distribution of the *Tung* tree is among the characteristic features of Sz'-chwan. Steep hillsides fit for no other cultivation are planted with it, and it appears to grow best among the wildest rocks. The nuts are gathered in October or November and oil pressed from them. Its price, in last season, was Tls. 3.3.0 per picul. The export amounts, probably, to more than four million Taels.

Salt.—All salt, in Sz'-chwan, is made from brine which is raised in wells. The territory on which they are distributed occupies a large portion of the Red Basin, and chiefly its most central regions. Pau-ning-fu, Tung-chwan-fu, Tsz-chau, and Kia-ting-fu are the departments which yield the largest amount of all salt produced in the province. That of Pau-ning-fu is locally consumed and provides the northeast of the province, together with the upper valley of the Han. Tung-chwan-fu salt is used in the surrounding regions, and goes north to Mien-chau and Lung-ngan-fu. But those places which provide nearly the rest of Sz'-chwan, including the whole West, the province of Kwei-chau, and the country of the Si-fan, are Tsz-liu-tsing, in Tsz'-chau, and Wu-tung-chiau near Kia-ting-fu. The first of these is the most important.

Tsz-liu-tsing is situated about 70 miles east of Kia-ting-fu, and almost aequi-distant from Sü-chau-fu and Lu-chau. The place with its surroundings is said to be the most populous and lively region of Sz'-chwan. As in all great manufacturing places in China, the people have the reputation of being very rude. I did not see the locality, because a visit to it from either the Min River or the Yang-tse can scarcely be performed in less than a week. The salt-wells are distributed on an area of 27 *li* diameter. To make a well, the Chinese use a long and elastic bamboo pole supported in the middle by a cross piece, a rope made by coupling the ends of long (not twisted) slices of bamboo, and an iron instrument which weighs 120 catties. The rope

is fastened on the thin end of the pole, and the iron on the end of the rope. A slight up-and-down motion of the thick end of the pole makes the iron hop and bore a vertical hole with its broad sharpened edge. The ground which is to be perforated consists chiefly of sandstone and clay. Those simple contrivances are therefore quite sufficient to do quick work. When a portion of the rock is mashed, clear water is poured into the hole, a long bamboo tube with a valve in the bottom lowered, and the turbid water raised to the top. For the protection of the sides of the borehole, pipes of cypress-wood are rammed in, and to prevent the water contained in the surrounding ground from getting access to the well, the pipes are attached to each other at the ends, with nails, hemp and tung-oil. The inner width of the pipes is about five inches. As the work proceeds, the pipes are rammed deeper, and a new one attached on the top. The rope, too, is made longer, by coupling to its end another length of bamboo-strips. At a depth varying from 70 to 100 *chang* (equal to 700 to 1,000 feet) the brine is struck, and the well fit for use. The brine is raised to the top with long bamboo tubes and bamboo ropes, as described, by means of a horsewhim, and then carried to large pans for evaporation, or led to them through bamboo pipes.

Besides these wells, there are others which are bored to the depth of from 1,800 to 2,000 feet. At that distance below the surface petroleum is struck. Immediately on reaching it, an inflammatory gas escapes with great violence. Work is now stopped, and a wooden cap fastened over the mouth of the pit, perforated by several rows of round holes. In each of them a bamboo pipe is inserted, and through these the gas is led under the evaporation-pans. The pipes ramify, and on each end a tapering mouthpiece terminating in a small aperture is attached. The gas is thus used for evaporating the brine. The enterprising spirit which induced the Chinese to examine the ground at so great a depth, is said to have had its origin in the drying up of a brine-pit. The proprietor was in hopes of meeting brine at a greater depth, but found in its stead the gas. Ten years ago, when the country was infested with rebels, they removed the cap from one of the gas-pits, and put fire to it. Since that time a long column of fire is said to rise from that pit, and it is considered near to impossible to stop the flame.

The gas-pits and the brine-pits are owned separately by corporations. The owners are subjected to a control from the government, which is however not vigorous enough to prevent a very large defraudation. The management of the government-monopoly is in the hands of a Tautai who resides at the place; but I did not succeed in trying to understand the intricate and yet somewhat loose ways in which the profits are divided. The salt-works of Tsz'-liu-tsing yield, however, a considerable revenue to the government, besides having enriched numerous proprietors, giving occupation to a resident population said to amount to several hundred thousands, and furnishing one of the chief articles of traffic and commerce.

The number of "fire-pits" is twenty-four, the salt-pits are "innumerable." Some of them do not enjoy the advantage of gas; their brine is evaporated with grass and wood.

Wu-tung-chiau is situated a short distance below Kia-ting-fu, on the banks of the Min River. The general depth of most of the pits of that place is 48 *chang* or about 500 feet. Some are said to be deeper, but no one to attain the depth of the brine-pits of Tsz'-liu-tsing; and there are no gas-pits. The brine is less concentrated than at Tsz'-liu-tsing, but the salt is of a similar description.

The localities which I have named are situated in a portion of the Basin which, so far as I am acquainted with the facts, is distinguished by the horizontal position of the red strata. There are, however, other places curiously distributed, where salt-wells were worked in former time, or are still worked at present, and where the brine occurs under very peculiar geological circumstances. They lie chiefly between the great limestone-folds in the south-eastern portion of the province, which I mentioned in another page. Among them is Kwei-chau-fu. When the water of the Yang-tse is at its lowest, pits are made in the river-sand opposite the city, and brine is raised during a few months. A more important locality is situated forty miles N.N.W. of that place, and ten miles north of the Yang-tse. It belongs to *Yun-yang-hien*. The salt-wells are there in a gully, on the northern foot of a limestone-fold. They are only 200 feet deep, but well constructed pits, four feet in diameter. In each of them the brine is raised in four buckets, which are made to ascend and descend with great rapidity; it is then conducted through bamboo pipes to the pans, where it is evaporated.

The salt of commerce is of two kinds :

1*st.*—*Kwo-pa-yen*, or "tabular pan-salt," consisting in solid tabular pieces of crystalline structure, which show still the shape of the pan. This is the best.

2*nd.*—*Ko-tsz'-yen*, or "granular salt." This is the second quality. It is always moist.

A third kind, *Sui-hwa-yen*, must be added. It is full of water, very cheap, and only used in the neighbourhood of the places where it is made.

In regard to the prices I will only mention a few figures which are probably correct :

Wu-tung-yen, that is, *Kwo-pa* from *Wu-tung-chiau*, is sold at the place of production by the manufacturers at 3,000 cash per 100 catties of 20 taels, or Tls. 1.4.0 per picul; at Ching-tu-fu, at Tls. 2.8.0 per picul. This is the average price at the capital ; it varies, according to the whiteness and dryness of the salt, from Tls. 2.5.0 to Tls. 3.0.0. *Ko-tsz-yen* is sold at Wu-tung-chiau at Tls. 1.2.6, but not brought to Ching-tu-fu.

Tsz'-yen, or the salt from Tsz'-liu-tsing, is sold, at the place of production, at nearly the same prices for the two kinds as that from Wu-tung-chiau. It is not used at Ching-tu-fu.

Kien-yen, a rather dark, granular salt *(Ko-tsz'-yen)* from Kien-chau in the department of Ching-tu Its price at the place of production is Tls. 1.3.0 per picul, in the various cities in the plain of Ching-tu-fu, where it is chiefly consumed, Tls. 2.1.2.

Yun-yang Salt is all granular, but tolerably dry. At the factories it sells at Tls. 1.1.0, at Yun-yang-hien at Tls. 1.2.0, above I-chang-fu at Tls. 1.9.0 per picul.

Coal.—If the calculation were accurately made, the area of the coalbearing ground in Sz'-chwan would probably be found to exceed in size the total area of every other province of China. But if that portion only which is available for exploitation is considered, Sz'-chwan compares unfavourably with several of them , chiefly with Shansi and Hunan, and, probably, with Kansu. And if the aggregate thickness of its coal-beds and the quality of the coal are duly put into the calculation, then Sz'-chwan takes still lower rank among the coalbearing provinces.

I have stated in another page, that the ancient formations which constitute the high mountainranges surrounding the Basin of Eastern Sz'-chwan, and make up, without any doubt, its understructure throughout its extent, are covered, first by a coal-bearing formation, and then only by the red sandstones and clayey deposits. Through probably nine-tenths of the area, the coal-measures are buried deep beneath these superincumbent strata, and would, with trifling exceptions, never be available for mining if they were there alike in nature with those portions of them which are worked at present. It appears, however, from reasons too complicated to be here detailed, that boring-tests would prove the fact of a great improvement of the coalseams in depth, as regards not only the quality of the coal but also the number and size of the coal-beds. Still, it is probable, that the best portions are covered by so great thicknesses of red sandstones that they will forever be, practically, out of reach for any means of exploitation, and those only which are intermediate in respect to favourable development form the subject of future mining. The places where the coal-measures are at present exposed to view are distributed in a distinct order throughout the area of the Red Basin. They are situated, firstly, along its limits, where it borders on the surrounding mountains ; in the north, the strata rise towards these, and are visible in remarkably fine sections. Secondly, they flank on both sides every bent-up fold of limestone, within the basin itself, also in those cases where this rock does not rise to the surface. All these belts of coal-formation are narrow but of great length. They are accessible for mining in those places chiefly where they are cut by rivers. The Yang-tse, as it exposes in succession the interior structure of the various folds which it intersects in its course from Sü-chau-fu to Hupè, exhibits the coal-measures in many places, and in all of them some mining is done. The formation extends into the adjoining regions of Kwei-chau, Yünnan, and Kien-chang (Ning-yuen-fu.)

It is difficult to determine the geological age of the coal-formation of Sz'-chwan, nor can it be accurately said where, in the succession of strata, it commences, and where its upper limit is reached. The coal-seams are always few in number, ordinarily one or two, and not far a-part. As regards the quality of the coal, it is in no place good, in some very bad, and in others moderately fair. The best is in the northern and western

portions of the basin, where only bituminous coal occurs. Towards the east and south, it deteriorates, and anthracite makes its appearance at certain levels. The easternmost locality, situated beyond the provincial boundary, in Hupè, is near the city of Kwei-chau. Mining is done there on a few thin seams of very inferior, dirty and friable anthracite. Notwithstanding these unfavourable conditions, the fact of the general distribution of mineral fuel is a great blessing for the country. Mining is easy and cheap, because a horizontal adit. starting in the outcroppings, is generally sufficient to open out for extraction a large portion of a coal-bed, All kinds of coal, not excluding the worst, are used for domestic purposes; the fuel is within reach of the majority of the people, at low prices, and the necessity of using firewood and, therefore, of planting trees for that special purpose, much restricted. No ground available for agriculture needs to be set apart for raising wood for fuel, which is an incalculable benefit in a country where nearly every portion of the surface can be made use of for cultivating some vegetable product of commercial or industrial value. The existence of the coal has, therefore, the effect to increase not inconsiderably the number of people who are enabled to earn their sustenance on the area of the Red Basin.

The value of the Sz'-chwan coal for foreign interests being at present nil, and its prospective value lying in an uncertain future, I will not tire you, at this occasion, with the long list of localities at which coal occurs in that province; it would attain some value only if it were accompanied by a geological sketch of the country. Sü-chau-fu, Ya-chau-fu, Ching-tu-fu, and the northern rim of the basin, from Kwan-hien to Kwang-yuen-hien, furnish the largest quantity and the best description of coal, so far as my experience goes. Chung-king-fu is supplied with a large amount of very cheap and very inferior coal. A better kind is brought down the Kia-ling-kiang, and sold at 2 cash a catty. East of Chung-king-fu, the localities where coal is mined are frequent on and near the Yang-tse; Kwei-chau is the last of them. The anthracite of that place is ground, and mixed with a little earth, then made up into small pyramidal-shaped bricks which are sold at 75 cash a picul. This article, together with some bituminous coal from a place higher up the river, is carried down to I-chang-fu. Beyond that city commences the extensive region which consumes Hunan-coal. It is not probable that these small exports, as they exist at the present time, will ever much increase in quantity. If steamers should succeed in overcoming the difficulties of navigation on the upper Yang-tse, they would find for their own purposes plenty of sufficiently good coal, and at a very cheap price, in the region of Sü-chau-fu, where it is mined in some localities close to the banks of the river and sold at one Tael per ton. Below these, I know of no coal that appears to be adapted for steamer-use, excepting that mined on the Kia-ling-kiang, which can be purchased at Chung-king-fu. Altogether the prices are so low, that even an inferior kind of fuel may be profitably used on steamers. Besides, steam-navigation would give an impetus to coal-mining, and in some places a better article than at present might be obtained by improved methods of working.

Iron.—The manufacture of iron from its ores is among the most generally distributed branches of industry in Sz'-chwan. In this respect, as in so many others, the province differs from the rest of China In no place is iron made on a large scale; but small foundries are scattered through several departments. The ores occur in the coal-measures; predominant among them is a gray clay-iron-ore; only in Ya-chau-fu I saw hæmatite applied. The purest kinds only are used; they are smelted, with wood alone, in high-furnaces from 20 to 30 feet high. The bellows are worked by hand. In a foundry near Chung-king-fu, I found an excellent clay-iron-ore from Ho-chau applied. Two kinds of cast-iron were made, white hard, and soft grey. The daily production is 4,000 catties. The price is nominally Tls. 46 per 10,000 catties. But two catties of cast-iron are equal to 17.3 taels. This brings the price of one catty to 14.5 cash, or Tls. 13.5 to 14.5 per-ton. Some of the cast-iron is converted into wrought-iron, of which 1,000 catties of 16 taels each are made daily. The price is Tls. 1.8.5 per 100 catties of 16 taels, or Tls. 29 per ton. To make the confusion of prices and weights complete, the iron-ore is sold to the foundry by the catty of 48 taels. Similar prices to these range everywhere in Sz'-chwan. The forgery iron in the shape of small cylinders is an article of considerable local traffic; its usual price is 30 cash a catty. The iron-industry was probably first introduced from, Hunan, as the process is nearly alike in both provinces.

Other Mineral Products.—As far as I was able to ascertain, no metals whatever, with the exception of iron, are the subject of mining within the Red Basin. In the regions adjoining it to the north-west, north and east, metalliferous deposits or valuable minerals are not known to exist. To the south, however, going into Kwei-chau and Yünnan, we enter, immediately beyond the borders of the Red Basin, upon a very remark

able mineral belt, which shall be more fully mentioned in conjunction with the products of Yünnan and Kwei-chau. It extends into Sz'-chwan, where it comprises the whole department of Ning-yuen-fu, and the district of Tsing-ki-hien in Ya-chau-fu.

Products of Agriculture.—As regards the produce of the fields, Sz'-chwan does not occupy so independent a position as Shensi. Grain is raised in abundance, in ordinary years; but the province produces only a trifling amount of cotton, and this deficiency is not made up by the various kinds of hemp which, the only textile plant raised in large quantity, is in some regions among the staples of agricultural products. Two crops a year is the rule, and in many places three are taken off the ground. Wheat is the staple in winter. It is planted everywhere, and, to judge from the crop of this spring, is of superior quality as regards fullness of ears and size of grain. Barley, peas, fieldbeans, poppy and, chiefly, rapeseed, are simultaneous crops with it. Rice is as general a summer-crop in Sz'chwan as cotton is in Shensi. The province is so well watered, that not only the level ground, but also the bottom of ravines, and many extensive hillsides, can be well irrigated. Other fields are planted, in summer, with beans, soya-beans, groundnut, Indian corn, sesamum, millet, kaoliang, hemp, buckwheat, &c. Tobacco occupies the ground for two and a half months in spring, buckwheat for three months in the same season; hemp is sown in spring and harvested in summer. In the high hills, potatoes are planted, and succeed well; at lesser altitudes their place is taken by the sweet potatoe. The sugarcane is planted in many portions of the Red Basin, and in a few places safflower is a valuable and well-paying crop.

The vegetables of Sz'-chwan are not surpassed by any of China as regards variety and delicacy.

5.—*CLIMATE OF SZ'-CHWAN.*

Sz'-chwan occupies an exceptional position among all the provinces of China as regards the mode of cultivation, and the products, of the soil. I have observed, in another page, that wherever, in China, hillsides do not consist of loess, or are covered with loam, we are accustomed to see little use made of them for agricultural purposes, beyond those limited portions which are terraced and capable of irrigation. In all the provinces south of that portion of the Yang-tse below I-chang-fu, the arable land, outside of the plains and valley bottoms, is therefore remarkably limited. North of it, and more particularly north of the lower Yellow River and the Tsing-ling-shan, the uneven ground is much more extensively cultivated, because loess prevails, but the hills protruding above it are barren. If the same rules did apply to Sz'-chwan, it would be a little productive and poorly inhabited country. After having seen the province of Hunan, which contains much hilly country but also large extents of fertile valleys, and yet lacks so many of the valuable products of Sz'-chwan (such as silk, opium, sugar, white wax, tung-oil), in the place of which it furnishes only tea and coal in better quality than that province, and exceeds it in the quantity of cotton, I expected to find in the famous province of Sz'-chwan extensive bottomland on the rivers, spreading between the hills which were well known to prevail, and the soil endowed with an unusual degree of fertility. Far from finding such a state of things, I had to describe Sz'-chwan as the most uniformly hilly country of China, in fact, with the exception of the plain of Ching-tu-fu, as made up of hills, with a few narrow patches of bottomland between. And these hills are not covered with loam, but—if we leave out of consideration the surrounding mountains, which are nearly unproductive, and confine it to the Red Basin—consist of red sandstone and sandy shale, not in many instances overspread in any great thickness with the products formed by the disintegration of those rocks. As regards the altitude of the country, I have mentioned that the river bottoms are elevated from 1,200 to 2,000 feet and more above the level of the sea, while the general altitude of the hills is from 2,500 to 4,000 feet, and rises to greater elevation in the ridges of the eastern portion of the Red Basin. Where we meet in other provinces with hilly regions similar in character to that of the Red Basin, we find them often clad with a luxurious spontaneous vegetation, but cultivated only in a small extent, unless they are planted with the tea-shrub. And yet, the most notable features of Sz'-chwan consist, not only in the general verdure which overspreads all, leaving only the broken faces of the harder beds of the sandstone exposed, but in the general distribution of agriculture, to which nearly all that verdure is due. It is probable, that in no country of the world, not excepted Japan, an equally perfect use of

the hillsides is made.* As in those beautiful islands, the cultivation of the soil is not limited to agriculture alone, but consists, in great part, in the planting of useful and ornamental trees, such as bamboo, tung-tree, mulberry-tree, cypress, fruit-trees and some kinds of fig-trees, which are very frequent and among the greatest adornments of the country. It is owing to these various circumstances that Sz'-chwan is, considered as a whole, the most beautiful province of China.

It is evident, that the productivity of Sz'-chwan is not due either to the configuration, or to an usual fertility, of the soil. Its chief causes are, probably, the advantages the province derives from its climate and from the ingenuity of its population. I will describe the former as near as I was able to form an opinion in regard to it.

Throughout the Red Basin the climate appears to vary immaterially. The month of September and the first half of October are usually dry. The rice is then harvested. In the latter part of October, and in November, the season is not rainy, but moist. Fogs are frequent. The winter-crops are then put into the soil. Light showers begin in November and continue through December and January, favouring the early growth of the crops. Snow falls on the hills, but disappears quickly, and is seldom seen in the valleys. At Ching-tu-fu, years pass without any snow. The winter of 1871-72 was one of the coldest on record; snow fell three times at the Capital. In February the rains cease, and the dryest time of the year commences. It lasts through March and April. The sky is brighter than at any other season, yet frequently overcast, and in the neighbourhood of the high western mountains, for instance at Ching-tu-fu and at Ping-shan-hien, fogs spread often over the valleys. The temperature rises quick. At the end of March I had 89° F. at noon for several days; the cicada's commenced already their monotonous music. The changes of temperature, however, are very sudden. The winter-crops grow now fast, and in the middle of April the harvest of wheat commences; in the first half of May the crops are nearly off the fields. Water is now turned immediately on those which are destined for rice, and all of them are prepared for the new crops. The rice has meanwhile been sown on overflown fields set apart for the purpose, and is planted in the beginning of June. The season is remarkably well adapted for its growth. In May the rains commence, and swell the rivers sufficiently to provide the fields with the required amount of water; they increase in June, and in July they are most violent; in August they subside. At the end of that month, and in the beginning of September, the rice has time to ripen. Soon afterwerds, the new turn begins with the preparing of the fields. In the plain of Ching-tu-fu, an intermediate crop of short duration is sometimes planted between the rice and the winter-crop.

If the climate of Sz'-chwan, as here described, is compared with that of Hupè, Hunan, Ngan-hwei, Kiang-si, Kiang-su, Che-kiang, Fo-kien, it will be found that the distribution of the rains in the various seasons is almost exactly the reverse. In these provinces, the months of October and November, which are foggy in Sz'-chwan, are the finest and driest of the year. About the end of December rains ordinarily commence; they increase slightly in January and February, are stronger in March and April, and decrease in May. In June and July the dry and bright weather is interrupted by thunderstorms, but rarely by more continuous rains. These recommence in August, and are frequent in September.

Sz'-chwan, however, is but one in a belt of provinces which share in the same distribution of the seasons. To it belong Yünnan and Kwei-chau on the south, and Shensi, Kansu, Shansi, and Chili on the north. Shantung appears to occupy an intermediate position, but to be more related to the northwestern belt than to the southeastern group of provinces. In the northwestern belt, Sz'-chwan occupies the most favoured place. It receives much more rain than the regions situated north of the Tsing-ling-shan, and the climate is milder than that of all the other provinces belonging to the same belt. It has not the excessive heat and cold of those in the north, and is warmer than Yünnan and Kwei-chau, which are much more snowy in winter, and have cooler summers, than Sz'-chwan. Another distinguishing feature of this pro-

* Where the angle of a slope is 30 degrees, the whole hillside is usually covered with fields from the bottom to the top. Where it is 45 degrees and consists of soft rocks only, as is frequently the case on the banks of the Yang-tse below Chung-king-fu, it is devoid of agriculture. But usually the varying hardness of the different strata causes breaks in the continuity of the slope, and then it happens that even at an angle of 60 degrees the slopes are lined with parallel patechs of cultivated ground, in places which sometimes appear quite inaccessible.

The contrast between this mode of cultivation peculiar to Sz'-chwan and that in use in the eastern provinces is very conspicuous in descending the Yang-tse. On emerging from the I-chang gorge, all the sloping ground with an inclination of more than 20 degrees is left completely to itself, and much of that which descends at a lower angle is equally uncultivated.

vince is, the rare occurrence of strong winds. During my stay of three months, I experienced only gentle breezes, and though strong gusts happen occasionally in summer, they are of short duration.

Famine of 1871-72.—The change of the seasons as here described is said to be so regular, and long-continued experience has so perfectly adapted the field-work to it, that any deviation from that regularity is likely to be attended with highly injurious consequences. The last three years have given sad evidence, of the truth of this conclusion, and chiefly the year 1871, which was the most disastrous on record since several decades. Unusually dry weather had not allowed the wheat to grow; then the rains set in so early, that it had no time to ripen, and moulded on the fields. When the rice was planted, the rains ceased. One half of the ricefields were without water, and dried up. People were kept for months to the most rigorous fasting—meat, fish, and even eggs being interdicted by order of the authorities. But this self-sacrifice did not mitigate the supposed wrath of their gods. For, when the rice was being harvested, torrents of rain poured down for about ten days in succession, and flooded the whole country, sweeping the rice off the fields.

I found, therefore, the country people reduced to a state of great poverty and destitution. Rice was, after much suffering, at last imported from Hupè and Hunan; but although large sums went to those provinces in return for it, the quantity was totally inadequate to the requirements. Commerce was prostrate, prices of food extremely high,* and those of luxuries low. Beggars thronged the gates of the large cities, and were frequent along the roads. I passed many a corpse of a person died from starvation on the roadside and left to the ravens and dogs. At Ching-tu-fu, about 20,000 people, most of them in a wretched condition, were fed daily by the authorities, under military guard, and outside the gates, from fear that they might create a serious riot in the city. Emigration had set in, and many families left for Han-chung-fu and other countries. It would indeed be a sad picture were I to draw in full lines the misery which I witnessed in the remoter portions of Sz'-chwan.

Although this state of things is exceptional, and, under normal circumstances, a degree of ease and well-being as regards the sustenance of life, not common in other provinces of China, appears to prevail in Sz'-chwan, calamities similar to the present have occurred repeatedly, and were every time attended with a great amount of suffering, and not unfrequently with deeds of violence. As there is not much room for extending the area of cultivated ground, the evils consequent on a failure of the crops must steadily increase, in every case, with the growing number of the population. I have attempted to show on another occasion (letter on Honan and Shansi p. 22), how much worse the northern provinces are conditioned in an emergency of this kind than those of the south; how the difficulty and expense of transporting supplies through the country, and the slowness with which they spread to all the suffering districts, make bad harvests a source of the greatest misery. Sz'-chwan, with its connection by water with countries which, having a different climate, are likely to be reversely conditioned in each case when the crops of Sz'-chwan are a failure, and with its navigable rivers which make remote districts accessible with comparative ease, would appear to be much more favourably situated than the northern provinces for keeping up a certain balance in the distribution of articles of food between it and the regions adjoining the Lower Yang-tse. But such is not the case. Several months pass before the first grain junk can reach Chung-king-fu, and that is the lowest place from which the various portions of the province must be supplied. Two months more are required for reaching the remoter districts. But the lower regions have so numerous a population, that it would require a larger flotilla than that of all vessels floating on the Upper Yang-tse,† to supply only those with their full requirement. It is, therefore, utterly impossible, with the means now at command, to make up a deficiency of food such as prevails at present in Sz'-chwan.

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* At Ching-tu-fu, rice had gradually risen from the ordinary price of Tls. 3 to Tls. 8 for 280 catties, and was still rising. Wheat flour had gone up from 15 to 20 cash a catty, which is the usual price, to 60 cash. Wages were slightly higher than before, and just sufficient to buy the rice for one man; but almost every man above 18 or 20 years has to support a family. The chief cause of the suffering was, the circumstance that a great number of working-men were thrown out of employ.

† Although it is not possible to estimate correctly the number and average capacity of these vessels, some idea can be formed from the fact, that cotton is the bulk of those articles which are carried up-stream, and that about 300,000 piculs of it (see next foot-note) are annually imported to Chung-king-fu. If this amount is doubled, to 600,000 piculs, we are probably not far below the figure which represents the bulk of the westward-bound trade. That of the goods which go eastward is however much larger, because the boats take double the cargo in going down-stream, and because many vessels built in Sz'-chwan descend to Sha-sz' and Hankau to be sold there. A considerable profit is made on them, and of course they take a cargo in going down.

6.—*GENERAL CONDITION OF THE COMMERCE OF SZ'-CHWAN.*

If the list of the products of Sz'-chwan, as it first became thoroughly known by the "Upper Yang-tse Report," is attentively considered, it shows that the people of that province can, in ordinary years, satisfy, without outward assistance, all their wants as regards articles of food, and are perfectly independent from other countries as regards the supply of tea, the stronger narcotics (tobacco and opium), salt, sugar, coal, iron and other metals, and various commodities, but are not able to supply from the products of their own country their full requirements for clothing. Their chief imports consist, therefore, of cotton and wool, and the cloth made from both. Raw cotton is supplied from Hupè, Hunan, and Shensi, but pre-eminently from the first.* It is distributed throughout the province, and some goes so far as Yünnan and Kienchang. The spinning of cotton, and its weaving into the ordinary Chinese cotton-cloth, occupies many hands, almost exclusively of women, and chiefly in those districts which produce little or no silk. The re-exports to the west and to Yünnan consist to a great extent in the cotton-cloth made in Sz'-chwan. Wool is imported from Shensi and the north-western regions, chiefly Kokonor, Sifan, and eastern Tibet.

The cotton and wool are paid for by the earnings from the sale of the large and varied products of the province; but after having provided for these necessaries of life, the people appear to retain a considerable surplus of their earnings, † which they are able to dispose of for purchasing articles of luxury. These consist in foreign piece-goods‡, chiefly woollen cloth§, furs, and many fancy articles. The general diffusion of a moderate wealth, as we find it in Sz'-chwan, appears to be particularly adapted to secure to such articles a wide and growing range of distribution. The inhabitants have much taste for decent and showy apparel, and for the exhibition of articles of value either on their bodies or in their houses. It is, therefore, to be expected that, in the course of time, they will become excellent customers for the foreign commerce. But as long as the present circumstances last, that can only be the case in good or average years. In case of a famine such as that which prevails at present, the people will not only reduce their earnings by throwing their produce at low prices into the market, but devote the surplus to the purchase of grain, and retain nothing for articles of luxury. Although this is a truism which is applicable everywhere, Sz'-chwan will,

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* The quantity of imported cotton is large. At Chung-king-fu, the average quantity distributed in various directions into the interior of the province was stated to me as 800 piculs a day, or about 300,000 piculs a year, which corresponds exactly with the figure of 200,000 bales of 150 catties each as given in the "Upper Yangtse Report." This amount represents the trade of Chung-king. To it must be added a considerable quantity which passes Chung-king-fu and goes directly to Sü-chau-fu and Kia-ting-fu, and another quantity which enters the province by land, from Shensi.

† Although it is not possible to estimate, with any aspiration to exactness, the aggregate value of the exports of Sz'-chwan, a few figures do exist which may serve as a first basis. In the list of Exports and Re-exports from Hankau, in 1871, as given in the "Returns of Trade" by the Imperial Customs, the following articles are easily recognized as products of Sz'-chwan:

Sz'-chwan silk	piculs	4,075	value Tls.	894,019
Safflower	,,	4,837	,,	294,795
White wax	,,	10,765	,,	647,029
Sz'-chwan rhubarb	,,	2,761	,,	35,616
Musk	,,	14	,,	58,629
Spelter	,,	1,913	,,	7,435
Copper	,,	515	,,	21,658
Wood-oil	,,	290,441	,,	1,825.701
			Total Tls.	3,784,882

Among the figures given for "medicine, opium, hemp, tobacco," the produce of Sz'-chwan is represented, but it cannot be seen in what proportion. We arecertainly below the actual amount, if we take Tls. 4,000,000 as the value of those products of Sz'-chwan which descended the Yangtse in 1871 in foreign bottoms. At least the same sum must be adopted for that portion of them, which left Hankau and Sha-sz' in native bottoms and by land-roads, for distribution northward, into Hupè, Honan and Shensi; although some products will be represented in a lesser ratio, the proportion of opium, medicines, tobacco is certainly larger, and to them must be added, sugar and salt, which are not at all in the first list. It is probable, that the sum of four million Taels would not be sufficient to represent the value of the export-trade to Hunan. At least, it is considered at Chung-king-fu, that the exports to Chang-te-fu and Siangtan are larger than those to Hankau. Another portion of the export-trade of Sz'-chwan, that directed, by land roads, to Shensi, Kansu, Shansi and Chili, to the countries of the Sifan and Kokonor, to Tibet, Yünnan, Kwei-chau, and portion of Kwangsi, escapes all attempts at valuation. The grand total of all the export trade of that province is therefore, probably, considerably above Tls. 12,000,000.

‡ Foreign piece-goods, perhaps with the exception of T-Cloth, are considered by the Chinese of all inland countries as an article of luxury. I have heard it invariably stated by the natives, in many provinces, that, as for durability, and cheapness in the long run, foreign cotton goods cannot compete with the native cloth, although their price by the square yard may be lower. It is the greater elegance, the evenness and finish which have made the wearing of foreign cotton-cloth "fashionable." The economical advantage of wearing native cloth is increased when it is home-made, as is the case in many households in Sz'-chwan. It is probable that the refined taste of the people at some treaty-ports who would scorn wearing the coarse garments made of native cloth, will spread in-land; it is the cities of Sz'-chwan where such a change is most likely to occur.

§ In no province is the taste for these so conspicuous as in Sz'-chwan. Broad-cloth is highly appreciated, and much in demand, not for protection against the cold, but on account of its outward appearance, and because it is not within reach of everybody.

on account of its isolated position, be more affected by circumstances of that character than many other countries would be. As regards the present famine, it would, in a country such as, for instance, Ngan-hwei, be a temporary affair, because, however serious the calamity might be, the deficiency would rapidly be made up by the influx of grain from the neighbouring provinces, while, as it befell Sz'-chwan, the serious detriment which must accrue to foreign commerce will probably be felt till some time after the country shall have revived by better harvests.

There are various ways in which an improvement in the commercial relations of Sz'-chwan with the East, and chiefly with the Lower Yang-tse, may be accomplished. The first is, the removal of the artificial hindrances to trade as they exist in barrier duties and taxes of various kinds, a subject so thoroughly treated in the "Upper Yang-tse Report" (p. 4) as to make it superfluous to say anything more in regard to it. It is but just, in relation to this matter, to acknowledge the liberality of the Chinese government in one respect. While the commerce suffers under inland taxation, no check is put upon the productive capacity of the soil. The taxes which the farmer in Sz'-chwan has to pay are merely nominal, and make him almost a free owner of the soil. They allow him to cultivate many an acre of ground which would not yield him profits, and lie waste, were he to pay the same taxes which are established in other provinces. The favoured position which Sz'-chwan enjoys in this respect is an heirloom from the time when, after the devastation of the province perpetrated by the first Manchu Emperors, they desired to offer inducements to settlers, and it is very creditable to the government that the privileges which it then granted have never been withdrawn. Foremost among the stations at which duties on goods are levied at present are: Kwei-chau-fu and Lu-chau on the Yang-tse, and Tsz'-chau, an inland place, situated at the crossing of several important roads.

The second means relates more closely to foreign commerce. It is the encouragement of the productivity of Sz'-chwan. There is room for the extension of the cultivation of several products which do generally not occupy any ground set especially a-part for them. Such are silk and tea. The deficient reeling and cleaning of the silk appear to be the greatest obstacle for its taking a more prominent place among the exports to foreign countries. Labour is so cheap in Sz'-chwan, that the people can afford to use greater care. This is not required for the Chinese market, and so long as that is almost exclusively supplied there is no need for the introduction of improved and more laborious methods. But when it is seen that gain can be made by coming up to the requirements of the foreign market, the people of Sz'-chwan are probably among the first in China to avail themselves of the advantages offered. The change will take time, but there can be little doubt that it will be accomplished. The fact that the mulberry-tree is planted throughout the province, and in places which occupy in no respect an exceptional position, goes far to make it probable that its cultivation can be extended in a very considerable degree. Regular mulberry plantations are seldom met with. The trees are scattered; and it appeared to me that, in every place where one tree stands at present, two or three, or more, might just as well be planted. As regards tea, it is not possible to speak with so much confidence of its prospective value for the foreign market. But if it is considered, that those regions which supply now the demand at the ports have been gained one by one, and have, by slow steps, adopted the proper methods for coming up to the requirements of the foreign taste, and that their range has gradually extended westward, no cogent objection can be raised against the suggestion, that Sz'-chwan may be drawn, too, into the sphere of those regions which prepare the leaf for the foreigners. That tea which is grown at present is decidedly bad, but that is no sufficient argument for disbelieving its capability of improvement if better methods in the mode of preparing it were introduced. I have hinted in the foregoing pages at the possibility that the tobacco raised in the plain of Ching-tu-fu may, if properly prepared, become an article of foreign export. And I will show in another chapter, that the metals of Sz'-chwan and the neighbouring regions have a good chance to figure in their lists at some time or other.

It is probable, that an increase of the wealth of Sz'-chwan by means such as those mentioned will take place, because a country so rich in valuable products as Sz'-chwan cannot escape attracting, in the course of time, that attention which it deserves; and it is probable that that increase would be attended with a growing influx of foreign imports into the country. But such a change would mitigate, and not impede, the fluctuations in the welfare of the people caused by the irregularities in the returns of the crops, and the consequent tides in the amount of funds available for the purchase of foreign goods. Nothing will tend so much to counteract these effects, and to elevate the province to the highest state of prosperity, by

balancing the effects of abundant and deficient crops, than the introduction of the means of a cheap and rapid communication with the regions adjoining it to the east. The question whether it is possible or not to introduce steam-communication on the Upper Yang-tse, can by no means be considered as decided. To a wise and provident government no efforts would be too great to thoroughly ventilate and decide that question, because the well-being of a large, industrious and wealthy population, which may justly be called the flower of China, is so greatly dependent on the introduction of improved means of communication; and the commercial interests at stake are so great, that the foreign community would do well to push the decision of the question. If steamers cannot ascend the Yang-tse, then no other means remains for the thorough opening of Sz'-chwan than a railroad. But unfortunately its difficulties would, in all probability, be enormous. Not only must the high range be crossed which extends as a broad mountain-region between the productive portions of Hupè and Sz-'chwan: but, on arrival in the Red Basin, an incessant defile of hills and deep-cut river-courses must be traversed, where there is scarcely a mile without its difficulties, until the plain of Ching-tu-fu, the most important terminus, is reached. However, our knowledge of the configuration of the surface is so imperfect, that the chances of such an enterprise must not be considered as hopeless, because, with the skilled and cheap labour of China, great difficulties can be overcome which would otherwise be an obstacle on economical grounds. As a railroad following the Yang-tse (which must be completely left out of consideration as utterly unpracticable) figures already ostensibly on a published map, it cannot appear an anachronism to point out, at this early day, the direction where probably the least obstacles will be encountered. Judging from the geological structure of eastern Sz'-chwan, as far as I am able to form an opinion in regard to it, it appears, that the most favourable line will start from the Han-river, at Hing-ngan-fu or Tsz'-yang-hien in Shensi, and cross the Ta-pa-shan in a south-westerly direction, to Shun-king-fu or Pau-ning-fu, and proceed thence through Tung-chwan-fu to the plain of Ching-tu-fu. The direct distance between Tsz'-yang-hien and this plain is only 280 miles. After crossing the Ta-pa-shan, the road would follow what appears to be the easiest and most productive portion of the Red Basin, and be supplied, in several places, with the best coal of Sz'-chwan, at very low prices.

7.—*THE PLAIN OF CHING-TU-FU.*

There are few regions in China that, if equal areas are compared, can rival with the plain of Ching-tu-fu, as regards wealth and prosperity, density of population and productive power, fertility of climate and perfection of natural irrigation, and there is probably no other where, at the present time, refinement and civilization are so generally diffused among the population. I have already stated, that the plain of Ching-tu-fu is the only large expanse of level ground in the province. Its length from south-west to north-east is 90 miles, its greatest width 40 miles, its area about 2,400 square miles. It contains the capital of the province and 18 *chau* and *hien* cities, several of which are superior to many a *fu* city of the other provinces as regards size, population, and stately appearance. Besides them, there are a considerable number of unwalled towns, but only few villages and hamlets. The plain is dotted with small groups of houses, in which the country-people live. Each one of them is nestled under a grove of bamboo, ornamental and fruit trees, which give the country the appearance of being wooded. If sixteen of these groups are taken to be the average on a square mile, and each group to contain 50 inhabitants (both of which figures are probably too low), we arrive at a country population of 800 to a square mile, or a total of 1,920,000 in the whole plain. Adding the population of Ching-tu-fu, which is reputed to be 800,000, and taking for the other cities an average of 50,000, or together 900,000, we arrive at a total of 3,600,000. Some of the cities have certainly less than 50,000 inhabitants, but some (such as Kiung-chau, Han-chau, Shwang-liu-hien) have considerably more. It is probable, that accurate statistics would give a higher figure than that arrived at here on the basis of rough estimates.

The plain has an elevation of, probably, from 1,600 to 1,800 feet above the level of the sea. It is bounded to the north-west by the steep descent of a high mountainous region which, at little distance from it, reaches above the snow-line. On the other sides, the sandstone-hills of the Red Basin rise immediately from the alluvial soil to altitudes of from 1,000 to 1,500 feet above the plain, to continue thence uninterruptedly for great distances. The high mountains protect the valley from the cold northerly winds. On the other hand, it must be ascribed to the cold air descending from them, that, at Ching-tu-fu, the changes of temperature are rapid, fogs of frequent occurrence, and the sky nearly always overcast. The temperature in summer is said to exceed seldom 100 degrees F.

A remarkable and most beneficial feature of the plain is, its natural irrigation. The north-western mountains are interrupted, only in one place, by a narrow gap, on the mouth of which is situated the city of Kwan-hien. Here emerges a powerful river, which has its headwaters in Kokonor. Immediately on reaching the plain, it spreads out into numerous channels. Following the slight inclination of the surface from north-west to south-east, they cross the plain, and converge again on the other side, not into one river, but into two separate and distinct rivers. One of them is the Min-kiang, which passes through the productive districts of Mei-chau and Kia-ting-fu, and reaches the Yangtse at Sü-chau-fu. The other is the To-kiang. It flows through the sugar and salt producing country of Tsz'-chau, and joins the Yangtse at Lu-chau. This river, before leaving the plain, is joined by a number of affluents: short rivers which descend from the front range of the north-western mountains and add to the number of channels of irrigation.

A natural irrigation and drainage is thus effected by more than twenty rivers, which carry the clear water of mountain streams, and are almost equally distributed through the extent of the plain. The channels are moderately wide, generally between 250 and 500 feet (reaching in some instances to 1,000 feet,) and deeply cut between steep banks. All the rivers flow rapidly; the current of those which came under my observation I estimated at 3 to 5 miles an hour. As they effect a perfect drainage, no embankments are needed. Only a few are navigable a short distance above the lower end of the plain. The industry of the population has made use of these unusual natural advantages, and created a system of irrigation which is probably not excelled in perfection anywhere. Numberless creeks and canals have been dug, and the water is distributed through them and through their branches and branchlets to every piece of ground for which that benefit could possibly be made available. At the places where canals divide or unite, or where the water is made to descend in a cascade to a lower level, the earthworks are protected by walls made of a sort of hydraulic cement. As the ground is subdivided into small fields, and every field has its own level, differing (sometimes only by one or two inches) from that of every other of the surrounding ones, it needed not only an immensely complicated system of irrigation works, but fully as complicated a code of regulations sanctioned by custom and usage, which determine the proportions in which the water of any one canal is distributed into its branches, and the order of succession in which the proprietors of different fields are allowed to make use of it. The system has been so far accomplished, that each rice-field receives, exactly at the right time, its sufficient supply of running water fresh from the mountains. That portion of the water which is no longer needed is easily drained off. The plain of Ching-tu-fu, if compared with other fertile plains of China, has this great advantage, that the swiftness of the current in the rivers and creeks prevents the country from being flooded. I have mentioned, that, in 1871, most of the rice-crop was carried away by water; but that was in consequence of the immediate effect of the violent and unceasing rains, and not caused by an overflow of the water over the banks of the rivers.

The products of the plain are manifold in kind, abundant in quantity, and superior in quality. Rice and wheat take the first place. Next in order is tobacco, the best of which is grown in Pi-hien, Shi-fang-hien, Sin-tang-hien. Hemp is produced in Wan-kiang-hien and Tsung-king-chau. Silk is raised in a large portion of the plain, chiefly in the southern districts. Kiung-chau produces tea. Poppy is not much planted, because it is less remunerative than grain. Rapeseed, beans, barley, and the many other usual crops of China are, of course, not wanting. Special mention must be made of the variety of delicious vegetables which are raised, and some of which are said to be peculiar to that region. They appeared to me superior to those raised in any other portion of China, and several of them are not known in Europe.

Of manufactures, no one occupies so many hands as those connected with the working of silk into various fabrics. There are large portions of Ching-tu-fu, where in every house spinning, dyeing, weaving, and embroidering are the occupations of the inhabitants. In the country, the reeling, washing, bleeching of the raw material are even in winter a conspicuous business. In the department of Kiung-chau, cotton takes the place of silk. It is imported from Hupè and delivered from the boats at the city of Kiung-chau. The manufacture of cotton-yarn and cotton-goods is there a general occupation, chiefly for the supply of the markets of Tibet and Kien-chang. In other districts, hemp gives a similar employment.

In a commercial respect, the plain of Ching-tu-fu is mainly a dependency of Chung-king-fu, so far as the imports from Sha-sze, Hankau, Siangtan and Chang-te-fu are concerned. Besides, it takes opium, tea and metals from Yünnan; cotton, wool, furs and skins from Shensi; some medicines and other produce

from the western mountains; and a great deal of Sz'-chwan produce from various places; such as salt from Kia-ting-fu and Kien-chau; sugar from Tsz'-chau; white wax from Kia-ting-fu; silk from the same department, Mien-chau, and other regions. Of the exports of the plain, little passes through Chung-king-fu. Rice and wheat are sent in large quantities down the river, and distributed through the eastern portions of the province. Tobacco is largely disposed of in all directions of the compass; a small proportion of its total produce reaches Chung-king-fu. A great commerce is done in silk, which is the most conspicuous article in the shops of Ching-tu-fu. That which is made in the plain itself, and in adjoining hilly regions, is brought for sale to Ching-tu-fu and some smaller places, among which the small mart Tsu-chiau, 20 *li* south-west of Ching-tu, is the most important, as it consists mainly of *silk-tien's*. These establishments, of which some very large and elegant ones are in Ching-tu, are a kind of exchange-houses, to which the merchants from the various districts repair, to offer their silk for sale. A great deal of silk is also brought from more distant districts. The principal portion of the business is done for the supply of the very large consumption in the plain of Ching-tu-fu But also the merchants from other places, chiefly those of Chung-king, buy here part of their stocks. Several large hongs in the latter city deal in what they call the "Ching-tu silks." Besides this, there are several other markets supplied with silk from Ching-tu. Considerable quantities are sent by land to Shensi, Shansi, Kansu, and Peking. I shall have occasion, in the next chapter, to speak of the supply of Tibet, Yünnan and other regions to the south-west.

Ching-tu-fu is among the largest cities of China, and of all the finest and most refined. Its walls enclose a square of 9 4-10 *li* each side, but the circuit, including the suburbs, is 48 *li*. On the northern side there is a suburb with a fine street a mile in length. The walls and gates are small, because large ones are not needed. The streets are broad, most of them straight, and cross each other at right angles. They are carefully paved with square flagstones, scarcely one of which can be discovered to be out of place, slightly convex in the middle, and provided with drains on either side. Their appearance is even more picturesque than that of the streets of Canton, because there is more depth to the views. The houses are adorned with fine and carefully elaborated wooden fronts. Within doors is an unusual amount of luxury, cleanliness and ease. Through the gate, the view opens into a series of yards, separated by open halls, every yard a garden, lined on two sides with well-made inner house-frontages. The institution of Clubs is quite general in Chingtu; the houses devoted to them have, when lit up by painted paper-lanterns, a touch of a magic appearance. People are remarkably well dressed, silk being a common material of wear. In the shops all woodwork is polished, and they are kept clean. A large proportion of them are devoted to articles of luxury, such as silk brocades, silk ornaments of all kinds, silk shoes, costly furs, silver-ornaments, articles made up, or set with, precious stones. More than twenty watchmakers find profitable employment; each of them has a shop with watches and clocks. Nowhere in China is art valued by the present generation as high as at Ching-tu-fu. All tea-houses, inns, shops, private dwellings have their walls covered with pictures, many of which remind one of the Japanese ink and watercolour drawings in point of artistic touch. I entered the city during the fortnight of the New Year's festivities. In the evening, every street was a sea of lights, every light put in a paper-lantern adorned with tolerably fair transparent paintings. This artistic taste is perceptible throughout the surrounding country, every smaller city being in that respect like a piece of Chingtu. No traveller can help being struck with the great artistic perfection of the triumphal arches worked in red sandstone which abound in the country. They are covered with sculptures in *haut* and *bas* relief representing scenes of mythical or everyday life, mostly with a tinge of the humorous; some of them are masterpieces of Chinese art. In no respect is the refinement more perceptible than in the polished manners and gentle behaviour of the people, in regard to which the inhabitants of Ching-tu-fu are ahead of the rest of China. Although in foreign dress, I took frequent walks through the city. The people avoided all appearance of taking notice of me, considering any symptoms of curiosity as below their dignity, of course, with the exception of the ever-present little urchins whose education is not yet finished. In the shops I was civilly addressed, and I met with the same civility on the part of the Yamên. The officials said that they made it a point of honour in Sz'-chwan to treat foreigners well, and proved practically that they meant more than polite phrases. Yet, as I had occasion to remark in another page, the people of Sz'-chwan do not like foreigners, partly because they are prejudiced against us by the most curious stories spread among them, and partly because they are on no good terms with the native Christians living among them. But if they would have the opportunity of frequent intercourse with educated foreigners, the probability is, that they would like them better than the Chinese of other provinces do.

I have mentioned these many particulars, because I believe it is not generally known, that so far in the interior of China, in fact just at the limit where the "barbarians" commence, there is a large city superior in almost every respect to those places with which we are acquainted, and inhabited by people devoid of most of those peculiarities which make the Chinese so inattractive to us.

The first cities I passed in the plain of Ching-tu were Tĕ-yang-hien and Han-chau. I was at once much impressed by their superior appearance, and thought they were the finest and most orderly cities I had seen in China till then. The people were just as well dressed and as well behaved as I found them afterwards at Ching-tu. The streets were as clean as those of the capital. Notwithstanding the present famine, it is evident that the people are wealthy on an average and have more wants than the Chinese generally. After leaving Ching-tu, I passed through several cities, and found my impression confirmed. But also the market-towns *(chin)*, of which there is quite a number, have an unusually comfortable appearance. In reviewing the various cities of the plain, I have, however, to draw of one of them an unfavourable picture. This is Kiung-chau, the second in size in the plain, and beautifully situated at the foot of high mountains, on the western edge of the valley. Long before going there, I was warned that the inhabitants of that city and department were in the worst repute of all places in Sz'-chwan, as being coarse and quarrelsome. All men are armed with long knives and use them frequently in their rows. I have passed few cities in China, in which I suffered so much molestation from the people as I did there, and travellers should avoid making night-quarters there, as it was my lot to do. The city is large, and overcrowded with people. They are badly dressed and have repulsive features. The mandarin complained that it was a hard lot to govern them, because there were incessant troubles. This singular population, consisting chiefly of descendants of emigrants from Fokien, is sharply restricted to the limits of the department, and surrounded by people of the general standard of the Sz'chwanese. These bear no ill-will against their rude neighbours, as they ascribe the difference in character to differences of soil and water.

Although there is not such an accumulation of money in any place in the plain of Ching-tu-fu as there exists at Chung-king-fu, still the people at large are visibly better off than in the surroundings of that city. It is in the densely populated plain of the far northwest where exists the greatest aggregate wealth of the province, and, probably, the greatest average prosperity, if the natives are considered individually. Its inhabitants have a taste for articles of luxury, and appear to be accessible to wants in respect to which the Chinese, as a rule, are impervious. They are now second-hand customers for a considerable amount of the staples of foreign import; but if ever more intimate relations between the foreigners and these people should be established, the commercial and social intercourse may become more lively and intimate than it is at several of the open ports.

8.—*WESTERN SZ'-CHWAN.*

That portion of Sz'-chwan situated east of the Min-kiang has always been little known, and only commenced to attract attention since a few years. But that which extends west of the Min is quite unknown, and forms part of the great *terra incognita* of Central Asia, which is enclosed between the two great diverging groups of mountain-ranges, the Himalayan and those which constitute the Kwen-lun. The farther we proceed eastward in the immense triangle enclosed on two sides by those ranges, the more densely, according to Chinese maps, which are our only source of information, is the space between both crowded with mountains. Their structure, their altitude, the order in which they are arranged geographically—all is unknown. Nor is it possible, before we have some slight knowledge of them, to say where they terminate, and which of the Chinese mountain-ranges constitute their eastern extension. A vast region, promising results of greater scientific interest than any other of the unknown regions of the globe, invites here exploration by the geographer and geologist as well as by the naturalist, and promises results of no less importance to the ethnologist and linguist.

I have communicated to you in the introduction to this letter, how my plan to explore at least a portion of the eastern outskirts of that region was frustrated by an adventure which would have been paltry in any other portion of China, but was fatal for my journey on account of the peculiar circumstances of the place where it happened. Nor were my attempts to make up for the loss by collecting information regarding the remoter portions of Western Sz'-chwan and Yünnan crowned with much success, for the reason that

the direct intercourse with them, from the side of Sz'-chwan, extends to certain places only, where it is taken up by other hands. Those places at which most information might be gathered are: Ta-tsien-lu, Hwui-li-chau, and Yung-pè-ting. The first of these is the chief transit place on the road to Tibet. Mr. T. T. Cooper's description of his journey to the frontier of that country, which did not come to my view, will doubtless contain ample information regarding the intercourse with Tibet. His long journey through an extremely interesting region has probably given him an opportunity to extend his explorations far beyond the limits of that road. Another very valuable source of information is to be expected in the publication of the results of the French Me-kong expedition. In view of the extensive contributions to our knowledge which will be given from these sides, it may appear bold on my part, to try to condense into some connected shape the scanty information which I was able to gather.

If a line is drawn from Lung-ngan-fu in the north, by Kwan-hien, to Ya-chau-fu, and from there to Ping-shan-hien on the Yangtse, west of Sü-chau-fu, it marks the western limit of the territory occupied by the Chinese exclusively, and coincides with the boundary of the Red Basin. West of the line, high mountains prevail, many of them reaching up above the line of perpetual snow. They are inhabited, in the main, by people differing from the Chinese in origin and language, and exhibiting their independence by not wearing the cue. Many of the numerous tribes into which they are divided are tributary to China, their chiefs *(tu-sz')* being invested by the Emperor, and considered as a sort of mandarins. Others are quite independent. So far as they inhabit the territory of Sz'-chwan, these aboriginal tribes are classed by the Chinese in four groups: Man-tse, Lolo, Sifan and Tibetans.

Beginning from the north, we first meet with the *Sifan*. They live west of Lung-ngan-fu. The Min-kiang above Kwan-hien is lined with places inhabited by Chinese; their last station is Sung-pan-ting. But in the mountains on both sides of the river live the Sifan, divided into numerous tribes, each with its own chieftain. They occupy the large department of Sung-pan-ting, also that of Mau-chau, and extend thence far west into Tibetan territory, and into Kokonor.

Their next neighbours south are the *Man-tse*, who are considered by the Chinese as the remnants of the ancient occupants and rulers of the whole province of Sz'-chwan. With the progress of its invasion by the Chinese, they retired more and more to the west. It is said that, at the time of the second Sung-dynasty, they occupied still the departments of Ya-chau-fu, Kia-ting-fu, and Sü-chau-fu, in all of which they left their vestiges in those cave-dwellings dug out of the red sandstone, to which Mr. Alex. Wylie has first drawn attention. They are frequent on the Ya-ho, between Ya-chau-fu and Kia-ting-fu, on the Min-kiang, and Yangtse. At present, the Man-tse inhabit the mountains immediately north and west of Kwan-hien, Kiung-chau, and Ya-chau-fu, and extend thence westward. On the road to Tibet, they occupy the territory till beyond Ta-tsien-lu, near which place is the residence of their supreme chief, a mandarin of the highest order; the position is hereditary among the descendants of the last independent Man-tse princes. Nearly all the Man-tse tribes are tributary to the Chinese.

The most independent tribe are the *Lolo*, the existence of which is a source of great annoyance to the Chinese. Their territory begins a little distance south of Ya-chau-fu, and extends thence uninterruptedly, across the Tung-ho (the river which descends from Tatsienlu and empties into the Min-kiang at Kia-ting-fu), to Hwui-li-chau, and beyond. On the east, they reach nearly to the line connecting Ya-chau-fu with Ping-shan-hien, and inhabit some mountainous districts on the right bank of the Yang-tse. The valley of Ning-yuen-fu forms part of their western boundary; but the city of Yuŏ-tsiuen-ting is situated within their territory. The Lolo country in Sz'-chwan extends through four degrees of latitude. It is mountainous throughout, and a complete bar to all intercourse from east to west. To go, for instance, from Sü-chau-fu to Ning-yuen-fu, a direct distance of 140 miles, requires at least twenty days of arduous travel, because the Lolo-country must be rounded either on its northern or on its southern end. A number of *ting*, or military stations, have been erected in various places along the confines of the region; but the garrisons which are kept there at great expense are barely sufficient to keep the Lolo at bay, and have never succeeded to make any lasting progress in annexing portions of their territory. A few chiefs in the neighbourhood of those *ting's* have been reduced to the position of *tu-sz'*; but in general, the Lolo of Sz'-chwan are perhaps the most independent of the various aboriginal tribes which inhabit China proper. While Mantse and Sifan intermarry with Chinese, this is never the case between Lolo and Chinese. They make frequent

inroads upon Chinese territory, and return with the spoils they can get. Their wants are small, and the chief object of their raids is the provision with salt, which they do not possess. The Lolo have been in their present condition since time immemorial, even while the Mantse were masters of the country. It is well known, that several of the independent tribes of Yünnan and Kwei-chau are also called "Lolo"; but I did not learn, on what grounds they are classed under the same appellation.

As to the *Tibetan tribes*, it appears that they inhabit the region adjoining the road to Tibet, west of Ta-tsien-lu, and the whole country west of Kienchang, with the exception of some small enclosures, where Chinese live.

The *Chinese* occupy a very limited aggregate area within the whole territory west of the dividing line of the Red Basin, being confined to a few valleys and to the highroads, along which there are some cities and villages inhabited by them exclusively. Foremost among the territories of which they hold possession is the valley of Ning-yuen-fu.

The Region of Kienchang.—A large area of Western Sz'-chwan is occupied by the department of *Ning-yuen-fu*, which comprises extensive districts inhabited by aboriginal tribes and partly inaccessible to the Chinese. That portion which is held by the latter alone is better known as "the region of Kien-chang." Its capital is the city of Ning-yuen-fu, to which the name Kien-chang is more specially applied; besides it, the cities of Yen-yuen-hien and Hwui-li-chau are most known. Kien-chang is, from all accounts I had of it, a remarkable region. Shut in on all sides by high mountain-ranges, and accessible by two or three long and difficult roads only, this secluded spot appears to be endowed with a singular charm, and its inhabitants to be quite a people of their own. The Chinese even, who have otherwise so little appreciation of beauty of scenery, speak of Kien-chang with a certain enthusiasm, and call it the finest country in China. The people, to judge from my muleteers and the coolies I met on the road, deserve fully their reputation of being an unusually good-natured race. Though most of them are believed to be the descendants of immigrants from Chekiang, the Chinese type is almost obliterated in their features, probably in consequence of intermarriage with aborigines. Ning-yuen is situated at the head of a valley directed from north to south, and varying in width from 10 to 25 miles. It is said to be a large city. The climate is exceedingly warm, and the crops are prolific. Cassia is among the products of the valley. Of the agricultural products nothing goes north, the surplus being disposed of in Yünnan, with which the relations are much closer than with Sz'-chwan. The wealth of Kien-chang consists in its metals, a subject to which I will return when speaking of Yünnan, and in the rearing of the wax-insect, which I have mentioned in the foregoing pages.

Roads.—Western Sz'-chwan is intersected by a few important roads, which are of interest as the only lines of intercourse through a vast and otherwise almost inaccessible territory.—1st, the *road to Tibet*.—Its starting place is Ya-chau-fu, the head of navigation on the Ya-ho, to which boats ascend from the Yang-tse. It passes through Yung-king-hien, Tsing-ki-hien, Ta-tsien-lu, Litang, Batang, Tsiamdo, and, though extremely mountainous, is a great highroad, provided with resting places, and kept in repair for traffic. In winter, the high passes are covered with snow, but still the road is kept open. The most difficult passage commences with the Chinese frontier, beyond Batang, and continues to Tsiamdo.—2nd, *The Road to Western Yünnan*. It starts, like the former, from Ya-chau-fu, and leaves the Tibetan road at Tsing-ki-hien (210 *li*), then continues to Yue-tsiuen-ting (5 stations of about 80 to 90 *li* each), Ning-yuen-fu (5 stations), and by way of Yen-yuen-hien and Yung-pe-ting to Ta-li-fu (about 16 stations). This was an important trade-road before the commencement of the Mahomedan rebellion in Yünnan. Although Ta-li-fu was its proper terminus, the road from there to Yung-chang-fu (6 stations), and Tang-yuĕ-chau (3 stations), may be considered as an extension of it. From the latter place there is only a few days' travel to Bhamo in Burma. It will be observed, that this road establishes the connection, in an almost straight line, between Ching-tu-fu and Bhamo. I was informed that, during the last years before the rebellion, some English goods found their way by it to the capital of Sz'-chwan. In its whole length the road is a bridlepath; and some portions of it are even now much travelled. The Mahomedans in Ta-li-fu are reported to be well provided with English goods from Bhamo. Between Ta-li-fu and Ning-yuen-fu the traffic is at present very small, but it is incessantly kept up between the latter place and Ya-chau-fu. Another important road connects Ning-yuen-fu with Hwui-li-chau (5 stations), and a less frequented one with Li-kiang-fu in Yünnan.—3rd, *From Ta-li-fu to Batang*, by way of Li-kiang-fu. By this old established route the trade between Yünnan and

Tibet is done. It has lately been little used.—4th, From *Tung-chwan-fu* in Yünnan, by *Hwui-li-chau* in Sz'-chwan, *to Ta-li-fu* in Yünnan. This road, which crosses the Kin-sha-kiang twice, will soon be well known by the description of it which is to be expected from the French Mekong-expedition.

Commerce of Western Sz'-chwan.—After having indicated the general conditions of the country and some of the principal directions in which intercourse takes place, a few words remain to be added as to the nature of the commercial relations which exist between the productive regions of the Red Basin on the one hand, and Western Sz'-chwan, together with the regions adjoining it north, west, and south, on the other. I will put the few data which I am able to contribute under the three heads of "Kwan-hien," "Ya-chau-fu," and "Sü-chau-fu," as these are the places from which the commerce starts in various directions. The trade of Sü-chau-fu, which embraces a large portion of that of Yünnan, shall be treated in another page.

1st.—*Kwan-hien.*—This city is situated at the head of the plain of Ching-tu-fu, just at the entrance to the narrow gate through which the Min-kiang emerges in leaving the high mountains. A much travelled rocky path leads to Mau-chau, which is situated higher up the river. An easy road connects Mau-chau with Lung-ngan-fu, and from both places, mountainous and difficult paths lead to Sung-pan-ting, a military station, high up on the Min-kiang. Immediately north of this place are the narrows of Hwang-shing-kwan, where the Jesuits marked the boundary of Kokonor. On the present Chinese maps, it is removed far to the north and west, annexing for Sz'-chwan and Kansu large portions of the old Kokonor or Tsing-hai.

The commerce of Kwan-hien is chiefly directed into the regions of the Sifan, of which it is the key. These people are said to possess excellent mules, better than those usually seen in Sz'-chwan. With them they bring the produce of their mountains to Kwan-hien, and take back what they get in exchange for it. It consists chiefly in sheepwool, deerhorns, shiploads of which can be seen on the Min-kiang, and various kinds of medicines. Foremost among these is *Rhubarb.* The plant grows wild on the highest mountains only. The Bayankara range, which divides the headwaters of the Yellow River from those of the Ya-lung-kiang and Min-kiang, appears to be the central line of its distribution, from which it spreads through the elevated country adjoining it north and south. On the south, it occurs on the mountains in the immediate neighbourhood of Kwan-hien, but the better sorts commence only at a distance of from ten to twelve days journey to the northwest. The chief markets of rhubarb are, Si-ning-fu in Kansu, and Kwan-hien in Sz'-chwan. That which comes from the former place is included in the denomination "Shensi-rhubarb," and commands the highest price, although the Sz'-chwan people are convinced of furnishing a superior drug. The price, at Ching-tu-fu, of the best sorts from Kwan-hien is Tls. 6.3.0 per picul.* The bulbs are not cut, and are of smaller size than those from Shensi, which the Chinese also designate as "horse-hoof rhubarb." In the western portion of the plain of Ching-tu-fu, a sort of rhubarb is cultivated on the fields. Its price is only Tls. 2.0.0 per picul, but it is far inferior to the genuine, which defies all efforts at cultivation, and probably similar in kind to that which is produced near Ta-ning-hien, in the mountains in which the frontiers of Sz'-chwan, Hupè and Shensi meet.

The articles which are exported from Kwan-hien into the Sifan countries are: tea, cotton, cotton-cloth, tobacco, sugar, salt. Chinese merchants are said to live scattered among the Sifan, and to keep the commerce in their hands.

Sung-pan-ting is commercially a dependency of Kwan-hien. The exports and imports are therefore essentially the same. The inhabitants are predominantly Mahomedans. Their commerce is said to extend very far. The merchants undertake expeditions as far as Si-ning-fu in Kansu. It takes an entire season to perform the journey across that grand cluster of intermediate mountain-ranges, and two years to go and return; the dangers are great, and frequently all the goods are lost.

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* At Chung-king-fu, the price of Kwan-hien rhubarb was Tls. 7.0, of that from Shensi Tls. 12.0. From the "Returns of Trade" for 1871, it appears that the prices at Hankau were, for "Kwan-hien" Tls. 13, and for "Shensi" Tls. 30, while the value at Canton is given at Tls. 50.0. In the last case the place of derivation is not mentioned. The low price of Shensi rhubarb at Chung-king-fu is perhaps due to the low amount of transit dues payable on the land-route, and to the fact, that two kinds of rhubarb are exported from Shensi, one of which is produced in that province and has the reputation of being of an inferior quality, while the other is imported from Si-ning-fu in Kansu, and there appears to be little doubt that that is the best of all.

There is also another, shorter, route from Kwan-hien, by way of Mau-chau and Lung-ngan-fu, into Kansu. It reaches this province at Kiai-chau; but the most difficult passage is from there across a high pass, which bears the often-recurring name of "Fan-sui-ling" ("watershed pass.") It goes thence to the rivers Tau and Wei. No mules can travel on that road. The traffic is done by coolies, but is said to be inconsiderable. The Tsing-ling road is in fact the only one practicable line of communication between Sz'-chwan and Kansu.

2nd.—*Ya-chau-fu.*—I reached this city after five days' travel from Ching-tu-fu. The plain extends till Kiung-chau. From there to Ya-chau-fu the road goes over a low tableland. The city is beautifully situated. West and south extends a semi-circle of high mountains, while to the east the hills are low and have gentle outlines. Several rivers descend from the high mountains and unite to the navigable Ya-ho. It is a large and lively place, because from it starts the trade to distant regions, on the two roads which I have described. The Ya-chau merchants do, however, the carrying only till Ta-tsien-lu and Ning-yuen-fu. The staples of the exports to Ta-tsien-lu are, tea and tobacco, of those to Ning-yuen-fu, cotton and cotton-goods. The *tea* for the Tibetan market is chiefly raised in Kiung-chau, Ming-shan-hien, Ya-ngan-hien, and Yung-king-hien (three districts of Ya-chau-fu.) At these places, the tea for home consumption is worth from 100 to 300 cash a catty, and the poorest people pay no less. But the ordinary quality of the tea for Tibet, which makes up the bulk of the trade, is sold at 15 cash a catty, or a little over a dollar a picul, by the producers. The full-grown leaves are gathered, late in the season, and without any care, and dried at the sun. The growers bring them to the tea-hongs at Ya-chau-fu and Yung-king-hien, where they are made up into long and flat bricks, for the purpose of convenient transportation. These bricks are wrapped in straw; each package, or *pau*, weighs 18 catties. In this state the tea is carried by coolies to Ta-tsien-lu, where the leaves are once more prepared for the Tibetan market. There is probably no road in the world where so heavy loads are carried by man across high mountains as are seen here on the backs of the tea-carriers. Six or seven *pau* is considered a small load; ten or eleven is the average, and, incredible as it may appear, I have seen frequently as much as thirteen (234 catties) carried by one man. I was assured, that some men carry 18 *pau*, or 324 catties. Of no other article they are able to carry so much weight as of tea, the reason being the mode of packing, which allows the load to be very equally distributed along the whole back and, as it were, among all the muscles of the body. The distance from Ya-chau-fu to Ta-tsien-lu is 560 *li*; it is made by the tea-carriers in twenty days; they receive Tls. 1.2.5 for five *pau*, which is equal to 250 cash daily wages for an average carrier. The commerce is very large, and great numbers of coolies are engaged in the traffic.

Other goods for the Tibetan market are: tobacco, cotton-goods, sugar, silk, white-wax; but neither opium nor salt. I saw also a convoy of silver (20,000 Taels) destined for the Chinese troops which are stationed in Tibet.

The most valuable product which Ta-tsien-lu sends in return is, musk. A considerable smuggling trade is done in this portable and valuable article; it must bring easy gain, as single travellers are met who come from so distant places as Canton and Si-ngan-fu, for the only purpose of taking back a small load of it. Although the musk-deer lives through the whole extent of Western Sz'-chwan, and is frequent in the mountains which separate that province from eastern Kansu, the musk-trade of all other places together appears to be insignificant as compared with that of Ta-tsien-lu. Coarse wool, rhubarb, and a great number of other medicinal herbs and roots, are among the rest of the products of the country which Ta-tsien-lu sends eastward. But I was unable to learn of any article of importance passing through the same place on its way from Tibet to China. The tea and tobacco coolies return therefore empty to Ya-chau-fu, with few exceptions.

The *commerce with Kien-chang* is more reciprocal. Cotton and cotton piece-goods, among which there is a considerable proportion of foreign origin, take the most conspicuous place among the exports to that country. Next in order is salt. It occurs largely near Ning-yuen-fu, but is of bad quality, and said to be injurious for the health; the poorer classes of the inhabitants use it on account of its very low price; but whoever can afford it, buys the imported salt from Wu-tung-chiau. Silk is now a small article of the Kien-chang trade, but was in former time the subject of a considerable commerce through Ta-li-fu to Burma. Ya-chau-fu imports copper from Kien-chang, and Kia-ting-fu the eggs of the wax insect.

The present extent of the trade to Western Sz'-chwan, and to regions beyond, including Tibet, the country of the Sifan, and western Yünnan, is not inconsiderable, in the aggregate; but in comparison with the size of those vast territories it is small. All of them, with the exception of Kien-chang, some portions of Tibet, and a few places in Western Yünnan, are thinly populated, and the wants of the great majority of the people are limited to the necessaries of life. And yet, foreign goods occupy already now a relatively more conspicuous place in the trade between Ya-chau-fu and Kien-chang than in many a region situated at much less distance from the treaty ports*; and when the direct intercourse of the foreign merchant with the natives shall have extended into the heart of Sz'-chwan, then those remote regions which are supplied from Kien-chang, Tat-sien-lu and Kwan-hien may be drawn more closely into the sphere of foreign commerce.

9.—*THE MIN-RIVER.*

I crossed the various branches of this large affluent of the Yang-tse first in the plain of Ching-tu. Boats ascend on the easternmost branch to Ching-tu-fu, on the main river a little beyond Sin-tsin-hien, and on a western affluent, which empties into it within the plain, to Kiung-chau. Above those places no navigation whatever takes place. At the mart Kiang-kou, all the branches are united to one single stream which is navigable, at all seasons, by large boats. The highest place where I have seen it is Kia-ting-fu. The Min-kiang is joined there on its right bank by the *Tung-ho*, which, although a larger river than the other, is navigable for about 200 *li* only. It descends from the Sifan country as a wild mountain torrent, passes not far from Ta-tsien-lu, and breaks through the great Omi-range in inaccessible gorges, dividing the independent tribes of the Lolo, on the south, from the tributary Lolo on the north. Shortly before its junction with the Min-kiang, it receives from the west the *Ya-ho*, which I descended from Ya-chau-fu to Kia-ting-fu. It is full of rapids, and considered very dangerous to navigate. Goods are mostly transported on bamboo rafts. The distance is 270 *li*, and easily made in one day in going down, but to go up-stream, four or five days are required. Freight either way is 500 cash, or Tls. 0.3.0 per picul. Cotton, cotton-goods, porcelain, tobacco, sugar, salt, silk—are the principal articles going up-stream; on the down-trip the boats carry iron pans and wrought iron from Yung-ping-hien, spelter and lead from Tsing-ki-hien, copper and coffin-boards from Kien-chang, potass made from herbs in the hills west of Ya-chau-fu, rhubarb and a variety of other medicines from Ta-tsien-lu. The country is one of the most lovely and fertile spots in Sz'-chwan. White wax and silk are its most valuable products. Kia-ting-fu is the centre of the trade in both. A-part of this and its beautiful situation, the city offers nothing worthy of note; it owes its reputation chiefly to the costly products of the surrounding country.

Below Kia-ting-fu, the Min-kiang is a fine stream. With the exception of a dangerous rapid above Kien-wei-hien,† it offers no serious obstacle to navigation. The current is swift but regular. Vessels taking as much as 1,600 piculs freight navigate the river and, at high water, ascend the small branch leading to Ching-tu-fu. The voyage with them, up-stream, is slow and expensive, owing to the swiftness of the current.—At Sü-chau-fu the Yang-tse is reached. It is a tolerably large city, and has a busy appearance, owing to the trade with Yünnan.

10.—*SÜ-CHAU-FU.—NOTES ON YÜNNAN.*

For all practical purposes, the Chinese view can be adopted, which considers the Min-kiang and Yang-tse as one stream, fed at Sü-chau-fu by a large but unimportant affluent (the Kin-sha-kiang), which is navigable for a short distance only, and serves in its upper course little or no purposes of traffic. For the navigation on the Great River, Sü-chau-fu is therefore only an occasional station on the way, which would have no further importance if it were not the Key to Yünnan. Here is the starting-place

* This fact which may appear startling at first sight can be explained in a natural way. If in eastern Sz'-chwan, for instance at Chung-king-fu, a certain kind of foreign cotton-cloth is cheaper by the square yard than the native, but the latter more profitable to use on account of its better wear, the proportion between the money-value of the two will change with the distance from that place. For, if equal amounts of freight are paid for equal weights of both, the difference in price per square yard between the native and foreign fabrics will increase, and at a certain distance, a limit will be reached where the imported cloth is just as economical for use as the native, and beyond that it may be even more profitable than this. Such may be the case at Kienchang, and therefore the demand for the foreign cloth be proportionately greater than at Chung-king-fu. This consideration is irrespective of any difference that may exist in the transit dues that are to be paid on one and the other of the two kinds of fabrics.

† This is considered the most dangerous rapid between I-chang and Ching-tu-fu. In November and December the danger is greatest; hardly a day is said to pass then without the occurrence of a wreck.

for the imports to that province, and the chief outlet for the exports from it. Some goods take other routes; but as far as the intercourse with China is concerned, Sü-chau-fu has taken the lead.

My project of a journey through the whole extent of Yünnan having been blighted, I must apologize for offering you a very meager account of the trade and products of that country, in the place of the full information regarding these and many other subjects which I was in hope I would be enabled to furnish. I have attempted to collect some date at Sù-chau-fu. But, as intermediate stations exist on the trade-roads, which are usually the farthest places reached by those engaged there in the trade, it is difficult to get the desired information accurately. I must remark here at once, that if Yünnan is spoken of as a commercial district, at Sü-chau-fu, the provincial boundaries are not strictly adhered to. A glance at the map shows, that a narrow strip of country, with the cities Ta-kwan-ting, Chau-tung-fu and Tung-chwan-fu, belonging politically to Yünnan, extends northward, between the department of Ning-yuen-fu (Sz'-chwan) on the west and the province of Kwei-chau on the east, and reaches to within a day's journey from Sü-chau-fu. All that passes through those cities constitutes what is called the commerce of Yünnan. Thus it happens, that *Hwui-li-chau* and other districts of Ning-yuen-fu, as well as some portions of Kwei-chau, in particular the district of *Wei-ning-chau* (in Ta-ting-fu,) are comprehended in that elastic term. In all what appertains to commerce and products, I will adhere to this well-founded and natural mode of division.

Present State of Yünnan.—The Mahomedan insurrection broke out in 1855. You are acquainted with its early history. It has been a drawing game ever since. The war consists not in battles, and scarcely in any fighting, but in the attempt of either party to gain small advantages over the other. The soldiers will cut off a body of rebels, and, if fortunate, contrive to besiege them, and, perhaps, finally, to take the place to which they have withdrawn. On neither side much valour appears to be displayed; the Chinese troops are decidedly deficient in active courage, and if the Mahomedans did possess it, they would make better progress. As regards strategic skill, the Chinese appear to have gained lately a few advantages. The Mahomedans occupy some cities in the west and south, with Ta-li-fu as their main stronghold. But around this place, and generally throughout the north and east, are the Imperial troops: strange to say, they are commanded by a Mahomedan, General Ma, who is believed to be true to the cause of the Chinese Emperor. The Governor of the province lives at Yünnan-fu. The rebellion did never spread north of the Yang-tse into the territory of Sz'-chwan; and in Kwei-chau, only the depart- of Hing-i-fu has been drawn into it. It is situated on the boundaries of Kwangsi and Yünnan. From there, through western Kwangsi, to Ling-ngan-fu, Po-'rh-fu, and the north-western portion of Tongking, the whole country is in a state of anarchy. Although Imperial civil mandarins occupy their posts in some of the cities, they are completely powerless. The people, who are partly Chinese and partly aborigines, are guided by petty chiefs, some of whom are Imperialist, some Mahomedan, and some independent. Deeds of violence are said to be of no rare occurrence; but apart from these little feuds, no active enmity appears to exist between the different elements. The Mahomedans of Yünnan exhibit much more good sense than those of Shensi and Kansu. They desire to rule the country, but do not destroy villages and cities, nor do they indulge in wholesale massacres of the population. They allow the inhabitants to carry on their agricultural occupations, and encourage trade, only diverting taxation from its previous channels into their own treasury. The Mahomedan Government restitutes to Chinese merchants the property stolen to them by its own subjects, and the malfactors, if caught, are beheaded. Still there is, also in those regions where the rebels exert supreme power, a state of anarchy and insecurity, and the presence of many Imperial soldiers is rather an additional cause of misery than of relief, in those departments still held by the Chinese. The numerous mountain tribes which, under many different names, are scattered through all portions of the province, have made use of the disturbed state of affairs, and regained to some extent their independence. They do not perpetrate acts of open hostility, but have put themselves in possession of the mines, most of which are situated within their territories. The production of metals has therewith nearly ceased.

These political troubles have, of course, very materially affected the trade and commerce of Yünnan, which are reduced to a mere fraction of what they were before 1865. They have never been great; and the marked attention which they have received must chiefly be ascribed, to the peculiar interest attaching to the eccentric position of Yünnan; to the existence of trade-roads, which pass through it and connect distant countries with each other; and to the circumstance that metals (among them gold) and

precious stones, both of which are to the common mind the most patent proofs of the existence of boundless wealth, have been from of old the most known products of Yünnan. As regards agriculture, the productive power of the province is considered inferior to that of Eastern Sz'-chwan, if equal areas are compared, and from the nature of the country it cannot be expected to be great on an average, although it is quite evident, that the province contains some naturally very favoured regions.

Little is known as regards the configuration of the surface in Yünnan. So far as I was able to draw inferences from scanty descriptions, it appears, that the central portion is occupied by an extensive plateau, ramifying in various directions; that this contains extensive valley-plains, at altitudes of from 5,000 to 6,000 feet, some of which are occupied, in part, by large lakes; that in them are situated most of the principal cities, for instance, Tung-chwan-fu, Yünnan-fu, Mung-hwa-ting, Ta-li-fu, Yung-chang-fu, Tsu-hiung-fu, Ling-ngan-fu; that the plains are overtopped by ridges which separate them, and, similar to those of Shansi, rise to a nearly uniform level, so as to exhibit, when seen from the plains, apparently connected, horizontal summitlines; also that these ridges and the whole plateau are built up of red sandstones and shales resembling in every respect those of the Red Basin of Sz'-chwan, and occupying a little disturbed position. Rivers small and large have furrowed their beds from hundreds to thousands of feet deep in these easily destructible rocks, and exposed the older ones on which they rest, rendering intercommunication in certain directions extremely difficult. It appears that on all sides, excepting to the east and northwest, a descent through the most ragged labyrinth of deeply eroded mountains commences from the outskirts of the plateau, where the red sandstones cease abruptly. To complete this sketch, some very elevated mountain-ranges must be mentioned, the snow-covered summits of which tower up high above the plateau. They are chiefly situated in the northwest.

The climate of Yünnan is known to be cooler than that of Sz'-chwan. In the summer months, the air on the plateau is said to be delightful, but unhealthy; in winter, the snow lies deep at Yünnan-fu, and covers the ground for weeks at a time. The valleys on the plateau are well fitted for agriculture, and the province is independent of its surroundings as regards food. But cotton is not planted, and the province lacks some of the valuable products of Sz'-chwan, as silk and white-wax.

Mineral Products.—The dormant wealth of Yünnan is founded in its mineral produce, in regard to the variety of which it is the first country of China.

Coal occurs in many places which are, it appears, distributed on the borders of the plateau. I learnt particulars in regard to those places only which are the first on the highroad from Sü-chau-fu to Yünnan-fu. The most noteworthy facts were related in regard to Chau-tung-fu, where anthracite ("no-smoke-coal") of superior quality is said to be mined in blocks so large that they must be carried by two men, and spaces "as big as the largest houses" are worked out underground. It would appear from this description, that a very thick coal-bed with very solid coal occurs in that place. At Tung-chwan-fu and Kiu-tsing-fu, an impure coal is mined. These are the last places of its occurrence, in a southerly direction.

Salt appears to be, comparatively, as largely represented in Yünnan as it is in Sz'-chwan. But I know nothing in regard to its mode of occurrence.*

Metalliferous Region of South-western China.—Turning now to the occurrence of metals, we are here in an extremely remarkable region, which is highly worthy a detailed examination, because a great variety and quantity of metalliferous deposits are distributed throughout its extent. The country so distinguished comprehends nearly the whole of Yünnan, from Ta-kwan-ting in the north to Po-'rh-fu in the south, and from the eastern boundary of the province to Tang-yuĕ-chau in the west. Besides, it extends across the Yang-tse, and comprises the whole department of Ning-yuen-fu, till Tsing-ki-hien, a district of Ya-chau-fu; and in the east, the district of Wei-ning-chau (department of Ta-ting-fu) in Kwei-chau. There are no positive indications to show,

* Since writing the above, Mons. Dupuy has kindly furnished me the following data: No deep brine-wells with small aperture, like those of Sz'-chwan, occur in Yünnan. In most localities there are pits of larger size, similar to those of Yun-yang, and not very deep. Mons. Dupuy heard of several places, where the brine is got by driving a tunnel into a hillside.

that the metalliferous region extends beyond those limits to the south, west, and north, but this is different as regards the direction to the east, or rather, northeast. I have had several statements given to me concerning the occurrence of ores of copper and silver through a large portion of Kwei-chau; but as no mines are worked outside of Wei-ning-chau, the statement cannot be considered as proved, nor would it be of importance at present. It is, however, a very remarkable fact, that, immediately adjoining the metalliferous region of Yünnan to the north-east, commences a belt distinguished by the occurrence of quicksilver and its ores. It extends through the whole width of the province of Kwei-chau. Quicksilver is found only in this belt, and not in Yünnan. I will now give briefly an account of the gleanings I was able to get in regard to the various metals which are exported from Yünnan to Sü-chau-fu.

Copper is the most conspicuous among these, and of the various trades at Sü-chau-fu that of the coppersmith is particularly well represented. Though arriving in a tolerably pure state, the copper is once more refined, and some of it worked up at once into sheets, wire, vessels, and various other articles of use. A portion of that which remains for re-export is made up into the shape of extremely coarse vessels, to avoid the duty which otherwise would have to be paid on the metal in going down the river in a crude state. Formerly it was the subject of a large trade. The copper-ore is so generally distributed throughout the whole metalliferous region, its deposits are said to be so easily accessible from the deep gorges in which the rivers flow, and the ore—to judge from the few specimens which I have seen*—is so pure, that mines could be worked in a great number of places when the political state of the country was not yet troubled. Yünnan Proper was then the chief source of supply. At present, the copper comes almost exclusively from Hwui-li-chau, in the department of Ning-yuen-fu. A considerable number of small mines are worked there in the hills north of the city. They are owned by private companies, on terms of a license which obliges them to sell the metal, at the fixed price of Tls. 8 per picul ($160 per ton), to certain holders of a government concession who reside at the mine and have a small military force at their command. These have to remit Tls. 2 per picul into the provincial treasury, and sell then the copper at the best price they can get for it. They are properly an association, consisting chiefly of merchants, but have usually one or several high mandarins (provincial governor, commander of military forces, &c.) as free partners, and the business is controlled by a buttoned commissioner. The expenses and risks rest with the merchant-partners. Some duties are paid on the copper on the road to Sü-chau-fu, and here the copper is sold at Tls. 20 per picul, or about $400 per ton of 2,000 pounds. The whole trade appears to be at present no more than from 500 to 600 tons a year. Hwui-li-chau is not the only place which contributes to it. Yen-yuen-hien and Si-chang-hien, both of Ning-yuen-fu, furnish too their share. The northernmost mines are in Mien-ning-hien (Ning-yuen-fu); the copper produced from them, together with some from the other places, belongs to the government and has its outlet at Ya-chau-fu.

White Copper (Pe-tung.)—This alloy has a conspicuous place in Chinese commerce. It is produced directly from the ores, in which the various composing metals appear to be always present in little varying proportions. Although generally believed to be derived from various places of Yünnan, Kwei-chau and other provinces, those engaged in the trade at Sü-chau-fu assert positively, that the only place where it is produced is Hwui-li-chau in Sz'-chwan. It is sold there at Tls. 40 per *tan* of 160 catties, or $500 per ton; at Sü-chau-fu, at Tls. 40 per *tan* of 100 catties, or $800 per ton. The Copper-smiths get it in the shape of round cakes of about seven inches diameter, but remelt much of it at once and alloy it with copper, zinc, tin, and lead, in certain proportions, so as to suit different purposes. To this circumstance is due the difference in the composition of pè-tung, which has been discovered by chemical analysis. Copper, nickel, and zinc were usually found as the chief constituents; most kinds contain also small quantities of lead, tin and iron. The alloy is used for an infinity of small articles, as water-pipes, tea-pots, plates, candle-sticks, incense-basins, and others.

Silver.—The supply of this metal is at present very small, and appears to have been at no time large. Most of it came formerly from Yünnan; but since that source has failed, the supply is limited to Wei-ning-chau in Kwei-chau. The ore of that place was described to me as "very rich, of black colour,

* The ores which I have seen are: copperpyrites of great purity, peacock-ore, and native copper. The last is said to be in some places the principal ore in use; it is found in small and large pieces irregularly distributed. The workmen meet frequently pieces which are too large to use, and, unable to cut them with chisels, are obliged to leave them in the ground.

resembling coal in appearance," and is said to be plentiful. The license which is given for the exploitation of a silver-mine stipulates, that the proceeds be divided into three portions, one "for the Emperor," one "for the mandarins," and one for the owner. Soldiers are stationed at the mine to watch the extraction. But there are so many sources of annoyance, that the production of silver is almost stopped. Firstly, the owners are robbed by the workmen. Then, the different corporations keep a sharp look-out at each other, and as soon as, at a mine which employs few men, some metal is ready for shipment, the men of another mine, who are stronger in number, attack those of the first and rob them of their gain. These two sources of danger are said to be surpassed by that which accrues from the presence of the soldiers, who are the most dreaded thiefs. Finally, when, after having got safely through all these dangers, the owners start with their hard-earned share of the proceeds to Chau-tung-fu, the next great market place, their purpose is known beforehand, and they are watched and frequently robbed on the road. It is evident, that silver-mining cannot flourish under such circumstances, be the mines ever so rich. Nor is it possible to discover a remedy, in a country where the government would have a difficult task in trying to appoint, to such a tempting place, mandarins and officers who are not corrupt and soldiers who are not lawless.

Gold is washed in many rivers, but chiefly in the Yang-tse above Sü-chau-fu, which is known only by the name of "Kin-sha-kiang" or Gold-sand River. Below the place where it is joined by the Ya-lung-kiang, the earnings of those engaged in the occupation are very small, and every other kind of labour is preferred to gold-washing. Above that place, the proceeds are said to be larger, and the average size of the grains of gold to increase, probably because its prime source is approached. There are a few places in Yünnan where gold occurs in ores, and was formerly the subject of mining; and it is said to be extracted at Hwui-li-chau, together with the copper.*

Lead is of frequent occurrence in Yünnan, including Wei-ning-chau. As long carriage by land would rapidly increase its price, every market is provided from the least possible distance only. Sü-chau-fu draws its supplies from Yung-shen-hien in Chau-tung-fu, situated at little distance from a navigable affluent of the Yang-tse, which empties below Ping-shan-hien. The price (Tls. 5.5.0 per picul at Sü-chau-fu†) is too high to allow the profitable shipment of the lead to any place beyond the limits of Sz'chwan.

Spelter or *Zinc* (pè-yuen), is an important product of Western Sz'chwan. The chief place of its extraction is Han-yang-kai, 20 *li* from the city of Tsing-ki-hien in Ya-chau-fu. Lead (hé-yuen) comes from the same locality. The mines are reported to belong to the Government, and both kinds of ore have the Government stamp. Of lead alone, 5,000 piculs was reported to me as the annual extraction, and of zinc it is believed to be considerably more. The market for both is Ya-chau-fu; but much of the zinc goes to Sü-chau-fu; it is in flat square pieces of 50 catties, and has a very perfect crystalline fracture. Zinc is also made in Ta-ting-fu in Kwei-chau; the market for it is Jin-hwai-ting. But, owing probably to the long journey by land from the mine to the market, the production is

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* It will be noticed that, in my letters on various provinces of China, I have very seldom made mention of the occurrence of gold, while, to judge from the statements of many writers, the Empire would appear to abound in that metal. And indeed, if the number of places in which gold is known to occur and forms, at present, the subject of extraction from the soil, were to be considered as a measure of wealth, China would be among the first gold-producing countries in the world, and be, perhaps, ahead of California. Mr. Pumpelly's valuable tables of places in which, according to Chinese books, gold is found, give 64 departments distributed in 14 provinces; and it would not be difficult to increase these numbers by consulting the reports of travellers. From my own experience on the subject, I have arrived at the conviction, that the great number of places in which gold is washed from river-sand, in China, at the present day, far from furnishing a proof of the wealth of the country, is, on the contrary, clear evidence of the superabundance of human labour, the general prevalence of relatively low wages, and the poverty, individually, of those engaged in the search for gold. It is not at all unlikely, that the early settlers in China had better returns from the same occupation, because the gold had accumulated in the river-sands through countless ages, before their arrival; but the gold-washers of to-day, with probably very few local exceptions, earn less than the lowest wages which they can get for ordinary labour, and take to that occupation in those seasons only when there is the least demand for field-work. We can therefore safely conclude, that (with those few exceptions), the greater the yield in gold, the greater will be the poverty of any one province. The sum total is, in some over-populated countries, not inconsiderable, and has quite misled the judgment of those even who have witnessed the miserable condition of the gold-diggers. It appears, indeed, that Yünnan, together with the rest of the metalliferous country, is the only portion of China where the gain, which gold has brought to those who have been engaged either in mining for it or in washing it from the sands of rivers, has been such as to compare favourably with that obtained from other industrial enterprises. The number of places in which gold occurs in the various hilly countries of Europe is probably greater, on an average, than an equal area's of China. But no notice is taken of them, because nobody could be induced there to wash gold with so little returns as are generally obtained in China, if Yünnan is excepted.

† This statement is doubtful.

small. Zinc is used for various purposes, for instance, for making rifle-bullets, and, alloyed with copper in various proportions, for making brass, cash, and casting guns; it is also alloyed with white copper, as above remarked.

Tin.—The most prolific mines from which this metal is derived at present are situated in the department of Ling-ngan-fu, in the south-eastern portion of Yünnan. It comes into the market in the shape of small truncated pyramids weighing about two catties a piece. There are several varieties of tin, owing to the admixture of other metals. The most valued of them (tsien-si) gives a ringing sound. I did not learn positively whether tin occurs also in Kwei-chau, but it is said to have been mined formerly at Tang-yue-chau in Yünnan. I failed to get reliable statements of the prices of tin and zinc.

Iron is largely distributed through Yünnan. None of it goes to Sz'chwan, since this province is itself well supplied with it.

If the list of localities, as given here with reference to the various metals, is completed by the extremely valuable tables of places at which useful metals and minerals occur in China, published by Mr. Raphaël Pumpelly, then the area through which copper, silver, lead, tin and zinc are distributed, in deposits of sufficient concentration to form the subject of mining, comprises, at least, 80,000 square miles. Within it, no metals occur on the plateau itself. The mineral ores are found in those rocks which underlie the red sandstones and are exposed on the sides of the deep cuts through which the plateau is drained, as before described, and in the rugged defiles of which the country is said to consist in those places where the cover of the red sandstones is removed by denudation. While China, throughout the rest of its area, is remarkably poor in metals other than iron, it appears as if the total wealth due in respect to their occurrence to so large an Empire were concentrated in this one connected region in the extreme south-west. There can be little doubt, that the ores are generally of good quality, and that the mode of their occurrence is, in numerous places, favourable for easy and cheap extraction; the first, because the Chinese possess an exceedingly limited knowledge of metallurgy, and the other, because with their simple modes of mining, and the inferior quality of their tools, and without using any blasting-powder, they are able to sell the copper at the smelting works at a remarkably low price. It is probable that China possesses, in the metalliferous region of Yünnan, a source of wealth which she has scarcely commenced to make use of. The position of most mining places is unfortunate as regards the transportion of the less valuable metals to shipping places, and the duties upon, and other privileged and non-privileged oppressions of, the metal trade are so onerous, that they would be equal to prohibition in other mineral countries; but these are obstacles which are not without prospect of being remedied in the future.

Other Articles of Export from Yünnan.—Besides the metals, there are several important products which leave Yünnan by way of Sü-chau-fu, even under the present disturbed circumstances. The following among them deserve some special notice:

Po-'rh Tea.—An extensive region in southern Yünnan, adjoining the boundary of Anam, and mostly inhabited by non-Chinese tribes, produces a sort of tea which enjoys an old-established renown throughout China. It extends eastward to Mong-tsz'-hien. But its centre is the department of Po-'rh-fu, and from this the tea has derived its name. The Po-'rh tea is distributed for consumption throughout Yünnan, but forms also the subject of a considerable commerce, by way of Sü-chau-fu, to Sz'chwan and regions beyond, and is carried by the long land-route as far as Peking. I known of no article of trade in China, that increases in price so rapidly as this, with the distance from the place of production. It is made up in small cakes, seven of which are wrapped in palm leaves, so as to form a drum-shaped package (*ch'ou*), weighing 3½ catties. Thirty of these *ch'ou*, weighing about one picul, are called a *tiau*. The price at the place of production is Tls. 7 to 8 per *tiau*. On its journey to Sü-chau, the tea passes upwards of twenty stations where duties are exacted, mostly from the chiefs of small independent districts. The sum total of these taxes is about Tls. 20. Adding the expense of freight, which is said to be no more than Tls. 6 per picul, on a journey by land of about sixty days, it is easily understood, how the price is raised to Tls. 33 to 34 per *tiau* at Sü-chau-fu (Tls. 26 at Yünnan-fu). Single packages are sold at Tls. 0.8 at Yünnan-fu, Tls. 1.2.0 at Sü-chau-fu, and Tls. 1.4.0 at Ching-tu-fu. This is the ordinary quality, of which the bulk of the export consists. Besides it, there exists a second quality, selling at Tls. 1 at Yünnan-fu, Tls. 1.4 at Sü-chau-fu (or Tls. 40 if sold by the picul), and Tls. 1.6 to 1.7 at Ching-tu-fu. Also at the place of production it is said to be sold at 2 mace above

the price of the other. The Chinese say, that this tea is more refreshing than any other kind, and, although strong, does not irritate the nerves as other green teas do, also that, if prepared in the Chinese way, it will bear seven infusions without showing any signs of being reduced in strength and delicious flavour. The excellence of the Po-'rh tea in these last respects, and its low price at the place of production, make it well worth a further examination; the more so as I will try to show, that Po-'rh-fu, although at great distance from any riverport in Chinese waters, is well situated in regard to another and much shorter outlet.

Opium.—The *Nan-tu*, or opium from Yünnan, ranks, in the opinion of the Chinese, next above that from Sz'-chwan and Kwei-chau, which, as I have said, is unanimously declared the lowest in quality of all kinds. The cultivation of the poppy on a large scale is said to have commenced in Yünnan at least sixty years ago, and in Sz'-chwan about 25 years later. The best is raised in Ta-li-fu and near Hwui-li-chau, that from the latter place being comprised in the denomination "Nan-tu." It is "dry and of yellow colour," which are considered desirable properties. The Nan-tu costs at present Tls. 14 per 100 taels weight at the places of production. An aggregate *li-kin* of Tls. 1.6.0 is paid on the various customs-stations on the road. It is sold at Sü-chau-fu at Tls. 16 to 17, but sometimes the price is as low as Tls. 13. The amount of annual importation is large, and stated to be considerably over one million Taels in value. The Yünnan drug is chiefly consumed in the cities next to Western Sz'-chwan, ranging from Sü-chau-fu to the plain of Ching-tu-fu. It is said that the poppy is a remunerative crop in the mountainous regions of Yünnan, because grain crops are apt to fail, while the poppy succeeds almost invariably.

Medicines, in the shape not only of herbs and roots, but also in those of fossil shells, bones, teeth, and various products of the animal kingdom, as it exists in the tropical regions bordering on Yünnan, figure largely among the articles of export from Yünnan, at Sü-chau-fu.

Precious Stones.—On the strength of the statement of ignorant Chinese, Yünnan is sometimes considered as a region abounding in precious stones. This repute is founded in the circumstance, that Yünnan is for most Chinese the *Utima Tule* of their geographical conceptions, and that indeed a considerable proportion of the gems used by the Chinese are furnished by the trade of that remote province. Most of them, however, are derived from regions beyond Yünnan; chiefly Burma *(Mien-tien)*, which is at present the chief source of the jade, besides supplying sapphires, rubies, common corundum, emeralds, &c. The mountains of Yung-chang-fu and Li-kiang-fu in western Yünnan are, however, reported to furnish jade and "*fei-tsui*," which is a high-priced variety of the other, and it is said that rubies are found on one of the high mountains of Ta-li-fu. The trade in precious stones was formerly directed to Canton, and what remains of it appears to go still by the same road; at least, that city is well provided with the jade from Burma, and none of it passes through Sü-chau-fu.

Imports of Yünnan.—Those imports which Yünnan takes from Sü-chau-fu, and which alone can be here considered, consist chiefly of cotton from Hupè, cotton piece-goods made in Sz'-chwan, some foreign piece-goods, and silk from Kia-ting-fu and Ching-tu-fu. Yünnan produces a trifling amount of cotton, but no silk. A fair balance of trade appears to be established by these articles. Besides them, some white sugar and tobacco are imported, as Yünnan (or at least its eastern portion) produces only inferior kinds of both; also medicines, and a few other articles of purely local interest.

Trade Roads of Yünnan.—Taking Yünnan as a centre, trade-roads go off in all directions, but are few in number. Beginning from the west, we have:

1st—*Road to Bhamo in Burma.*—From Yünnan-fu there are 12 days to Ta-li-fu, and in 8 days more Tang-yuĕ-chau is reached, whence the road to Bhamo is well known by the description given of it by Major Sladen, with which I regret to be not acquainted. The entire distance from Yünnan-fu to Bhamo is probably 28 days, and only little in excess of that from Yünnan-fu to Sü-chau-fu. It is an easy road as far as Ta-li-fu, but beyond that place the difficulties are said to be very great, since high mountain-ranges and the deep-cut river-beds of the Lan-tsang-kiang and the Lu-kiang or Salwén must be crossed in succession. It is well known that various ways have been proposed, by which both natural and political difficulties connected with the re-establishing of this old road and its turning into efficient account for foreign commerce, might in some measure be avoided. But—in consideration that the commerce of Bhamo could, in no case, aspire to supply more than a portion of Yünnan, and perhaps, the department of Ning-

yuen-fu in Sz'-chwan—it is not probable that a road will be found, that does not present natural difficulties in too great a measure as to be able to remunerate the expense of constructing a railroad, which is the avowed ultimate object of the explorations and propositions. The great task would have to be overcome, of connecting, by an easy grading, the low country on the banks of the Irawaddy with a very elevated country, deeply intersected in various places, (and chiefly there where the ascent would necessarily take place), by large rivers flowing at right angles, or at least obliquely, to the direction which the intended roads would necessarily take.

2nd.—*Roads from Ta-li-fu and Li-kiang-fu to Batang.*—It appears that two roads exist which connect these places: one on the left bank of the Kin-sha-kiang, and one on the right bank, the first of which is more important than the last. They establish the connection between Western Yünnan and Tibet, and are of interest for foreign commerce, if the possible chances of the Bhamo road for supplying Tibet are taken into consideration. The plain fact, that the distance of Bhamo from Batang, by way of Tali, is about double the distance between Batang and Ya-chau-fu, which, as I have shown, is the highest shipping place on affluents of the Yang-tse in the direction of Tibet, makes it probable, that the Bhamo road would have no chances of competition with the other.

3rd.—*Road from Tali, by way of Kienchang, to Ya-chau-fu and Ching-tu-fu.*—I have given in previous pages some particulars regarding this formerly important road.

4th.—*Road from Yünnan-fu to Sü-chau-fu.*—This is, at present, the most travelled and most important road of all. It is calculated at 24 *tsan* or stations, of 50 to 80 *li* each, viz., 6 to Tung-chwang-fu, 6 from there to Chau-tung-fu, 3 thence to Ta-kwan-ting, 3 to the mart Lau-wu-tan, and 6 to Sü-chau-fu. From Yünnan-fu to Lau-wu-tan, coolies or small ponies are employed, from there to Sü-chau-fu only coolies. The cost of freight is, Tls. 2.6.0 per picul to Chau-tung-fu, and Tls. 2.8.0 from there to Sü-chau-fu; or Tls. 5.4.0 for the entire distance. A picul is allowed to have from 110 to 120 catties.

5th.—*Road from Yünnan-fu through Kwei-yang-fu to Wang-ping-chau in Kweichau, and down the Yuen-River to Chang-te-fu in Hunan.*—(See my "Letter on Hunan" p. 9.) It is not in use at present on account of the troubles in Kwei-chau.

6th.—*Road to Canton.*—This is an ancient and important trade-road, which has come into disuse since a few years only, on account of the insecurity of travel in western Kwangsi. The land travel was, 12 days from Yünnan-fu to Mong-tsz'-hien, which is an important centre of trade, and 8 days from there to Pè-sè-fu on the Canton west river. From there, the journey was continued to Canton by boat. This last portion required about 20 days in going down-stream, and 42 in going up (8 from Canton to Wu-chau-fu, 18 to 20 from there to Nan-ning-fu, 14 from that city to Pè-sè.) The metals of Yünnan, the jade and gems of Burma, the musk of Ta-tsien-lu, and many other articles of that remarkable through-trade which passed through Yünnan from west to east, went formerly by that route. At present it is not even used by travellers.

7th.—All the roads here enumerated involve long, laborious and expensive travelling and carrying by land, and are of a nature tending to impede, rather than to develope, the commerce and resources of Yünnan, the more so as the most valuable products of that province are metals which cannot bear a long transportation by land. So long as they only exist, and even in the case that they should be improved, and some of the difficulties be removed which attend the voyage on the Yang-tse and other rivers, Yünnan will remain an almost sealed-up country for commerce. There is however, another route which, though indeed not existing till now for any purposes connected with foreign commerce, promises to become of much importance in the future. The report has long been current, that Yünnan is directly connected with the sea by a navigable river. It is that marked on foreign maps as the *Songka river*, which empties into the sea in the gulf of Tongking. If the report should be true, then the whole territory of eastern and southern Yünnan would have an easy outlet to the sea. The tin of Ling-ngan-fu, the tea of Po-'rh-fu, the various metals which are mined in different portions of the country, would reach the sea without difficulty, and foreign imports could enter Yünnan by the same road. In view of this probably existing but not developed trade-route, the impending opening of Hainan appears to be an important event. From it, as a basis, the present state of the mouths in the Delta of the Songka might be examined, which were navigable for deep-going vessels when, first the Portuguese and Dutch, and later, French and English merchants were established at the city of *Hien*, at the head of the Delta of the Songka. It is true, that the number of the inhabitants of Yünnan is not

very great, and that the other regions which would be opened by the Songka river, with the exception of the rich plain adjoining its lower course, harbour a thin population. Yet, a country abounding in metals, and capable of producing copper at $160 a ton, is certainly deserving attention in no ordinary degree.*

11.—*CHUNG-KING-FU, AND THE PROVINCE OF KWEI-CHAU.*

The Yang-tse, between Sü-chau-fu and Chung-king-fu, is so well known by the descriptions of it given by Capt. Blakiston and Rev. Mr. Wylie, that there is no need to dwell on it more particularly. The only important place on the left bank is Lu-chau, at the mouth of the To-kiang, a great market of sugar and salt, and the chief Customs-station. On the right bank, there are two cities, Na-ki-hien and Kiang-hien, situated at the mouth of rivers which descend from Kwei-chau, and mediating a portion of the commerce of that province. Yung-ning-hien and Jin-hwai-ting mark the head of navigation of the two rivers, and are the collecting and distributing places for Kwei-chau. Small boats only are employed for the traffic on these and several other less important rivers. The chief marts on the Yang-tse for the commerce of Kwei-chau are, Sü-chau-fu and Chung-king-fu, but more especially the latter, which is also the focus of the greater portion of the trade of Sz'-chwan.

Chung-king-fu is a large city, very populous, and one of the chief centres of trade in China. The number of inhabitants is given as 700,000, which, if correct, would put it only 100,000 below Ching-tu-fu. These people live crowded on an area no more than one half of that occupied by the capital. In point of beauty, comfort, width of streets, elegant house-fronts, aristocratic appearance, and predominance of articles of luxury, Ching-tu-fu is much a-head of Chung-king-fu; but this is thoroughly a commercial city, with a great deal of shipping, and direct connections with many of the chief places of the Empire. It has great banking houses and wealthy merchants, who do business on a large scale. But the wealth derived from commerce is, as I have remarked on another page, chiefly concentrated in the hands of men from other provinces, viz., Shansi, Shensi, Kiangsi, while that of Ching-tu-fu is more generally distributed among natives of Sz'-chwan. Considering its relative importance as a place of commerce, Chung-king-fu ranges, in the opinion of the Chinese, considerably below Siang-tan in Hunan, and as regards the quantity of shipping, the comparison is undoubtedly correct. Two causes may be assigned to this relatively inferior rank. Firstly, there is, as I have said, a not inconsiderable trade carried on directly between the marts of Hupè and some cities situated above Chung-king-fu, as Lu-chau, Sü-chau-fu, Kia-ting-fu, and even Ching-tu-fu. Then, the commerce of Sz'-chwan, as a whole, appears to have not arrived at the same state of development as that commanded by Siangtan. This is established since very ancient time, while Sz'-chwan has grown during the present dynasty into what it is at present. The resources of the country were to be developed gradually, and the commercial development did probably proceed at a similar rate. Siangtan, owing to its commanding position on the highroad from south to north, had every commodity put within easy reach, and the commerce could take a definite character at an early epoch, and then progress in the once established lines, at the same rate as the exports of tea and coal increased. Such is not the case in Sz'-chwan. By the bounty of nature, assisted by their own industry, the people of that province were enabled to arrive at a high state also of external refinement, in making use of no other commodities than those available for them among the products of their own country. Situated, as it were, on one of the extremities of communication, they have failed to discover all directions in which they would be able to satisfy their latent wants, scarcely known to themselves. It is for this very reason, that foreign commerce has a fine field before it in Sz'-chwan, since it may supply that which is missing, more perfectly than the industry of the neighbouring provinces of China is able to do.

* After the conclusion of this letter, I have had the pleasure of an interview with one of the most enterprising and skilfull mordern travellers in China, Mons. Dupuy, and was surprised to learn from him, that he has, a short time ago, been to the Songka river, and descended it by boat from the head of the navigation a long way down. It is the merit of his laborious researches, to have solved the problem, and proved the truth of the report which I have mentioned above, and which had already attracted the attention of those admirable explorers, the gentlemen of the French Mekong expedition. They had not been so fortunate in regard to this important subject as their indefatigable countryman was in 1871. He discovered, that from *Mong-tsz-hien*, the trading centre above mentioned, which is still situated on the plateau, a two days' journey, including a long and steep descent, leads to a small affluent of the Songka, where the navigation commences at the mart *Man-hau*. The river is there enclosed between steep mountains, interrupted by very fertile valleys, in which rice and sugar are cultivated, and is navigable to the sea. He puts Mong-tsz-hien at only 10 days' journey from Yünnan-fu. The distance of the capital from the head of navigation would, therefore, be no more than 12 days, against 28 days from Bhamo and 24 days from Sü-chau-fu. Although steamers will probably not be able to go very high up on the Songka river, the fact, that its head-waters are situated in the heart of some mining districts of Yünnan, is of sufficient importance, because the river may become a means to transport the metals to the sea at low rates of freight. An additional interesting result of Mons. Dupuy's observations is this, that in the department of Ling-ngan-fu, coal is of frequent occurrence and forms the subject of mining. Much other valuable information regarding those regions is to be expected from the intelligent observer who kindly gave me these notes.

The position and commercial importance of Chung-king have been illustrated, and the commerce thoroughly and minutely treated, in the "Upper Yang-tse Report." Nothing remains for me to add on these points. Also as regards the notes on the province of Kweichau contained in the same document, I found the information conveyed in it substantially confirmed in every particular. The rebellion in Kweichau has indeed no connection with the Mahomedan insurrection of Yünnan, with the exception of the above mentioned department of Hing-i-fu, in the extreme south-west of the province. Nor is it the Miau-tse or other aboriginal tribes which instigated the revolt. The emigrants from Kweichau, who are numerous in Sz'-chwan, are unanimous in ascribing the outbreak to the Chinese themselves. When the troubles had commenced, the province remained infested by lawless bands roving through the country, and robbing and killing the peaceable inhabitants. This state of things has prevailed since 1848. At present, the insecurity of residence is no longer ascribed to those banditti, but to the great number of badly officered and undisciplined Imperial soldiers who infest the province. The Miau-tse—the cruel extermination of which, in those districts where they can easily be crushed by an overwhelming force of soldiers, appears to be at present the avowed aim of all operations, and the invented pretext of the officers who desire to remain in a lucrative employment —are highly praised by those Chinese who have had intercourse with them or resided among them, chiefly on account of a certain generosity and liberality of character, which appear to distinguish them from the Chinese. It is, however, added, that they are soon roused when they discover that they are treated with injustice. This they have suffered in a flagrant degree on the part of the soldiers, and it is no wonder if they try to retaliate cruel treatment. A war has thus been artificially created which has no prospect for termination. Since a number of years, the Miau-tse hold possession of several *fu* and *hien* cities near the frontier of Hunan; the valour of the troops, which are kept at great expense in Kwei-chau by the Imperial government, and which cause a much greater indirect loss, by checking the cultivation of the fields and, generally, the development of the productive power of the province, was not sufficient for re-taking those cities, and their highest exertion appears to be, the oppression of the peasant, and the cruel putting to death of those few Miau-tse whom they can get hold of without risking their own life. So long as this state of things lasts, Kweichau will continue to be the least productive, the least populous and the least important among the eighteen provinces of China.

Kweichau did temporarily revive in 1862 and 1863, when Sz'-chwan itself was in a troubled state. Many people from the neighbourhood of Sü-chau-fu and other places on the Yang-tse went there, with the intention to settle permanently; but the majority of those who were not killed or did not die from disease returned during the following years, and the central departments of Kweichau are believed to have retained no more than thirty per centum of the total population which they had in 1863. Living is described as very cheap in that province, all articles of food costing only half of the price which they have in Sz'-chwan, in ordinary years. But the climate is said to be very unhealthy. The country has little running water, but much which is stagnant, and only those who are born there can withstand the effects of the malaria which it creates. To this circumstance is ascribed the fact, that the population of Kweichau has always been thin The climate has deteriorated since the commencement of the troubles, because it constantly happens that corpses of killed are putrifying on the fields. The drinking water of wells is considered as particularly unhealthy. Although mountainous, the country is said to contain more level ground than Sz'-chwan in the neighbourhood of the Yang-tse, but it is not well adapted for the cultivation of rice. Opium is raised, but not in large quantity; in quality it is rather inferior to that of Sz'-chwan. The best portions at Kweichau appear to be, the plain of Kwei-yang-fu and, next to it, some regions in Ta-ting-fu, and Tsun-i-fu. The last did formerly belong to Sz'-chwan, and is still more closely connected with this province than with the rest of Kweichau.

The natural outlet for the products of Kweichau is the Yuen-river in Hunan. It is navigable at Wang-ping-chau, a city situated at a short distance from its source, but now in the hands of the Miau-tse. A few Chinese merchants are tolerated by these, and some commerce continues to go down the Yuen river. Chung-king-fu, though now the chief market, is, in ordinary times, second in value as a port for Kweichau produce, and does mainly the commerce of Tsun-i-fu and a few other departments in the north.

After having mentioned, in another chapter, the products of Wei-ning-chau in the west, which consist in copper, silver, lead, and zinc, two other articles of produce only deserve further notice—viz, quicksilver and wild silk.

Quicksilver has been, from of old, the chief commercial product of Kweichau. At the beginning of the present century it was still among the regular articles of export from Canton. Then it failed, and became an article of import, rising gradually in quantity, until it reached the figure of over 10,000 piculs, in 1831 and 1832. Suddenly the Chinese did no longer require the foreign quicksilver, and from 1838 commenced again to export it. This state lasted till about 1849. Since then it has become again a regular article of import. But the quantity required is much less than in former years, and is about 3,000 to 4,000 piculs annually. These alternating flood and ebb tides were probably caused by the periodical disturbances in Kweichau. When the last one commenced, in 1848, the mines were abandoned, and they have not been re-opened since.

The places where the quicksilver occurs appear to be limited to a well defined belt, which extends through the whole province, from south-west to north-east. One of the principal mining districts, and the only one in regard to which I was able to get some information, was Kai-chau (in Kwei-yang-fu). The mines were scattered there on an area of ten *li* diameter. The works were entered by inclined shafts, and some were extensive. I was unable to get a clear idea regarding the mode of occurrence of the ore; but it is said to exist in considerable quantity, and to have been difficult to mine only on account of the presence of much water. The extraction of metal is vaguely given as 25 per centum of the weight of the ore, which is probably an exaggeration. The daily extraction in the district was (according to my informant) 20 to 30 piculs. The metal was sold at the mines for Tls. 32 per picul, at Chung-king-fu at Tls. 50. At present, much imported quicksilver is sold. Its nominal price, at Chung-king-fu, is Tls. 110 per 100 catties of 16.2 taels each; but the actual price to those engaged in the trade is Tls. 81.3.4. The mines of Kai-chau are now filled with water. It is intended to re-open them, and the governor of Kwei-chau desires to participate in the enterprise. If the mines are really what they are reported to be, if quicksilver can be produced now as cheaply as it was before 1848, and if mining is done on a grander scale than before, then the trade in quicksilver may again become large and important, and China may export a much larger quantity of it than she did formerly. The mines of Kai-chau have the advantage of being situated near Wang-ping-chau; the metal can therefore conveniently and cheaply be shipped to Hankow. If the Chinese government should succeed to restitute order, and security of life and property, in Kwei-chau, one not unimportant branch of trade at least has a fair prospect to attain some magnitude, irrespective of any other development of the resources of the province. The number of places, at which quicksilver is found and was mined, is so great as to make it not improbable, that, in respect to the quantity of this metal awaiting extraction, Kwei-chau is far a-head of any other known quicksilver producing country on the globe. In many places, Cinnabar is brought to the surface in ploughing the fields. This mineral, besides Realgar and Orpiment, form the rest of the former mineral exports from Kwei-chau. Ores of copper, lead, and silver are reported to be of frequent occurrence, among other places in the region of Kai-chau; but I know nothing definite in regard to them, and, with the exception of Wei-ning-chau, they did never, or at least not lately, form the subject of mining in any locality. The spelter of Ta-ting-fu should be excepted, although it has almost ceased to be produced.

The province of Kwei-chau contains also *coal;* but, so far as I was able to get information in regard to it, it is only anthracite of an inferior quality.

Wild Silk.—This is the only product of value from the department of Tsun-i-fu, where its manufacture occupies many hands. The best silk is sold at Tls. 0.0.8 to Tls. 0.0.9 per tael, at Tsun-i-fu; it is woven into pieces 58 Chinese feet long, and 15 Chinese inches wide, which is just sufficient for two long robes of an elegant Chinaman's dress. Three kinds of these piece-goods are made. The ordinary heavy kind weighs about 32 taels; its price is Tls. 0.1.25 per tael, or about Tls. 4 a piece. This is considered the best Pongee of China, and as much superior in strength and durability to that from Shantung. The second kind is thinner, weighs about 24 taels a piece, and is sold at Tls. 0.1.4 per tael; most of it is dyed. The third is very coarse and cheap, but only locally consumed. The trade in the first quality is estimated by those engaged in it at about Tls. 500,000 a year, and that of the other two kinds together at nearly the same. Most of the first and second kinds goes to Chung-king-fu, and thence to other regions, chiefly Shensi, Shansi, and Peking, where it is largely used. A considerable portion is sent directly to Siangtan, and some, on land-routes, to Kwangsi.

12.—*THE YANG-TSE, FROM CHUNG-KING-FU TO I-CHANG-FU.*

The Report of your Delegates to the Upper Yang-tse has put you in possession of full information regarding this portion of the river and the general commercial relations of the cities situated on its banks. Much is also known from previous descriptions, chiefly that given by Capt. Blakiston; his admirable chart of the Yang-tse, from Hankau to Ping-shan-hien (a distance of 1,107 miles), is deserving of the highest appreciation, chiefly if it is considered that it is the work of one single individual, and was executed within the short space of five months. I descended in my boat, with the rapid current, halting only occasionally for the purpose of a geological ramble. As this mode of travelling did not give me the best opportunity for increasing the stock of knowledge which is accumulated from so competent sides, a few brief notes concerning the views at which I arrived from my own limited experience will be sufficient on this occasion.

The beautiful scenery of Sz'-chwan Proper, the air of comfort, wealth and refinement pervading even the rural districts, the gentle slopes richly covered with green fields and plantations of valuable or ornamental trees and shrubs, the forests of orange trees extending on the banks of the river, the freqnency of temples and sacred shrines built in conspicuous places under groves of gigantic fig-trees, the busy appearance conveyed by the numerous farms scattered on the slopes and connected by a net of paved foot paths—all these charms of the scenery cease at Chung-king-fu. The river below that place is cut deeper; the slopes descend at a higher angle; the strata of the rocks, and with them the surface, are made up into regular folds striking parallel to each other, from south-west to north-east, and culminating in ridges of from 2,500 to 3,500 feet elevation above the river. Till Kwei-chau-fu, the harder rocks (limestone) form only the axial cores of the ranges, and soft rocks prevail; also does the river flow predominantly in a direction parallel to the ranges, in the long troughs which separate them. But the true surface of these, too, lies high above the bed of the river, which flows in deep and gloomy canals cut into the horizontally stratified red sandstone. Little space only is left for human habitations. Below Kwei-chau-fu, the scenery becomes grand, because there the river intersects the folds at right angles, and the ancient and, mostly, very hard rocks which I have described as encircling the Red Basin, and constituting its under-structure, become, prevailing at first, and then sole constituents of the mountains. It is, in fact, the direct continuation of those mountain-ranges which constitute the northern half of the province of Kweichau and impart to it an inhospitable character, which is here crossed by the Great River. The limestone, which takes part in their composition in the shape of long rugged ranges, is cleft in narrow chasms directed transversely to them, and the whole volume of the water is forced into the small compass which the vertical walls allow it to occupy. These are the famous gorges of the Yang-tse. Between the limestone-belts, others are enclosed of a more gentle character of surface, and made up of a variety of rocks which I will not further detail. Where the river crosses these belts, the rapids occur. They are occasioned by certain obstructions put in the way of a continuous descent, and consisting, in some places, in a slight bending up of some hard strata, in others, in veins of a hard syenite which intersect soft granite. In either case, these rocks form a natural weir, which stows up the water, and then causes it to descend more rapidly.

In the whole course from Chung-king to I-chang, the Yang-tse receives only one large affluent. It is the Kien-kiang, which empties on the right bank. This river descends from the western borders of Kwei-chau, and flows through the whole extent of that province, but is navigable only from the place where it leaves it, which is 520 *li* distant from Fu-chau, a large city built at the place of its confluence with the Yang-tse. The communication established by it with Chang-te-fu in Hunan is described in the "Upper Yang-tse Report." It does not exist since long time, as it dates from the time of the subjugation of the independent tribes of Yu-yang-chau. That region is still occupied by a rude and semi-barbarous population, not friendly either to foreigners or Chinese mandarins. The route is not of much importance, because the rivers on both sides of the land-passage of Yu-yang-chau are wild mountain-streams. The Kien-kiang is navigated by small boats only, expressly built for shallows and strong rapids. All the other affluents of the Yang-tse are small, and though every one of them appears to be navigable in one or other portion of its course, they drain only wild mountainous countries; some of them flow through gorges more forbidding than those of the Yang-tse, and it is only by the aid of steep and inconvenient footpaths that the inhabitants have contrived to establish connections between the gloomy dens in which they live and the principal marts on the Great River.

Yet, such is the bounty of nature in Sz'-chwan, that it has rendered even this wilderness susceptible of producing in quantity some of the most valuable articles which constitute the wealth of this remarkable province. Chief among them are : Opium, of which Fu-chau is the principal market for export-trade ; Tung-oil, which is shipped from every mart on the river, but is produced in greatest quantity in those districts which are least fit for other crops ; salt, which is manufactured in various places between Wan-hien and Kwei-chau. Besides these are to be mentioned, Tobacco, Hemp, Tea, Silk, Coal, Iron, Rhubarb. Grain is raised in sufficient quantity to feed the population, in ordinary years. If the river should ever be opened for steam-navigation, this not unimportant produce could be collected at certain stations, as Kwei-chau-fu, Wan-hien, Fu-chau, or such others as might be selected on account of their affording a better anchorage.

Turning now to this point—namely, the prospects of introducing steam on the Upper Yangtse, I will no longer dwell on the paramount importance which such an improvement would have for the development of the commerce of Sz'-chwan, as it is too patent in the light which your Delegates in 1869 have so admirably thrown upon this subject. But so long as no thorough survey of the river is made by competent men, a non-professional traveller may claim the prerogative of presenting the impressions regarding the practical feasibility of the scheme, which he got by his own experience, however slight or doubtful their value may be for the ultimate solution of the question. The chief point is still this : is it practically possible, or not, to navigate the Yangtse above I-chang with steamers? When I descended the river, scarcely any rain had fallen in Sz'-chwan ; and while, at Hankau, the water was at 30 feet above the lowest mark, owing to the copious rains which had prevailed in Hunan and Hupè during March and April, the river between Chung-king and I-chang was only a few feet above its lowest level, ten feet being the highest figure at which the difference was estimated by various persons ; and that was in a narrow gorge, where the total rise in summer is over 80 feet. The state of the river was, therefore, approximately that which it presents, on an average, between October and April, and the swiftness of the current much less than in the other five months. Also at that state of the water, the difficulties and dangers for ordinary navigation are great. Difficulties are experienced only in travelling up-stream, when the large boats are tracked through the rapids and gorges by bodies of coolies numbering often upwards of fifty men. Dangers may then accrue by the breaking of the line. But these exist chiefly in going down-stream. They are owing, not so much to the rapids themselves as to the eddies following immediately below each of them, where sometimes the entire surface of the stream from bank to bank is one countercurrent. Other dangers are caused by the whirls in the gorges, where the current is very frequently broken by rocks projecting from the banks. The skill with which the pilot at the helm manœuvres the ship through whirls and eddies, ordering it to be steered often in what would appear to the inexperienced the most dangerous place, is very remarkable. Still the most skilfull pilot cannot prevent the ship from whirling around occasionally. It happens then, that small vessels are completely engulfed, while larger ones may be thrown against the rocks. These dangers do not exist for steamers, because, going at a rapid rate, they can be steered without difficulty, and will generally make headway against a countercurrent, and overcome the laterally applied force of the whirls. The own rate at which a native boat goes down, that is, the velocity imparted to it by rowing, is seldom more than one mile, and in bad places, where the men work harder, two miles an hour, but the usual rate is probably no more than half a mile. The steering power is, therefore, very small, and hence arise the dangers. Nowhere will steam-navigation be easier and safer on the Upper Yangtse than in the gorges, and above and below the rapids, because the water is deep.

The difficulties which steamers have to meet are caused by the rapids themselves ; and the dangers are founded partly in the peculiar character of these, and partly in other circumstances. The rapids are few in number (probably no more than ten or twelve), and each one of them is short. The most violent, at the time of my journey, appeared to be the following three—viz., the first one above I-chang, the Sintan rapid, and one above Patung ; they are situated, respectively, 16, 32, and 62 miles from I-chang ; the first of

these, and another just above Shantauping, and 21 miles from I-chang, were apparently the longest ones. The velocity of the current is so great in them, that a correct figure cannot be arrived at by a mere estimate, because it would remain guess-work. It is, therefore, among the most important tasks, of those who may be hereafter engaged in surveying the river, to define accurately the velocity of those currents, as it is during the seven months of low water, and then during the different stages when the river is rising. If it should be too great for a steamer to run against, then, in the absence of any possibility of cutting a canal in the banks of the river, the only means of overcoming the difficulty would be the same which is applied by the Chinese in going up-stream—namely, the tracking up of the steamers, which may, however, for the sake of economy and safety, be converted into pulling, [perhaps by means of winding upon a cylinder fastened in the steamer herself a strong rope attached to a stationary object above the rapid]. The expensive human labour might thus be supplied by steam-power.

If it is possible to overcome the strength of the current in the three first named rapids, then there will be, during the seven winter months, no further difficulty from that source, on the whole way to Sü-chau-fu, and even as far as Kien-wei-hien on the Min river, because all other rapids are of less magnitude. The dangerous rapid above that place, though very short, is probably too shallow for steamers. Another difficulty, which may occasionally be a source of danger, is the scarcity of anchoring ground. The river is, however, too little explored to speak positively on this point. The greatest real danger, in the eyes of an occasional observer, must appear to be, the rocks in the river-bed. It exists at high and at low water. There are—to cite one out of many instances—long reaches where the river has, within its wide rocky bed, scooped out a well-defined narrow channel, which contains the whole volume of the water, in winter time. This singular feature is most perfectly developed above and below Wan-hien. The winter-channel is there encased in rocky banks with an uneven surface. At low water, navigation is perfectly safe; but, during the time of rise and fall, and at high water, in fact as soon as the river commences to occupy its larger bed, it must be exceedingly difficult to keep the mid-channel; and any deviation from it, except at the highest state of the water, must be fraught with dangers. Precisely the reverse is the case as regards the rapids. Aside from the difficulties attending the velocity of the current, no true dangers can be apprehended from them at high water, because the river-bed, although wide, is there not interrupted by rocks protruding above low water. But it is probable, from the nature of the rapids, that most of them are beset with small and sharp rocks projecting to very near the surface, at low water. If such should be the case, it will be an important task of any future survey, to determine exactly the best canals they may offer for going up or down.

Notwithstanding these obvious difficulties and dangers, the prospects that the Upper Yangtse will be found navigable for steamers, are not hopeless. The magnitude of the objects which are thereby to be accomplished should not be under-rated. A population, perhaps equal in number to that of Great Britain; surpassing that of all other provinces of China in refinement, in average wealth, and in wants; applying skill and industry in no common degree to the raising a quantity of valuable and very varied produce; well adapted to the intercourse with foreigners; commanding the commerce of two other provinces (Kweichau and Yünnan), and a portion of that of remoter countries (Tibet, Sifan country)—this population is connected with the rest of the civilized world by one inconvenient mountain-road (that of the Tsing-ling-shan), and one large river, the Yang-tse. That river is the outlet of the produce of the country, and its feeding channel as regards the supply from without; it is the main-road of travel, and the only way by which the people can hope to have calamities such as the present mitigated, however imperfectly. Now, by overcoming a certain number of impetuous passages on an otherwise fairly navigable river, steamers can go amidst that population and penetrate into the heart of their country, or, at least, to regions situated from 1,100 to 1,200 statute miles beyond Hankau, richly supplied with cheap coal, communicating by water with all productive portions of the province, and occupying even now the position as the key to the commerce of the vast territories adjoining Sz'-chwan west and south. The produce of the country would then be carried, at cheap rates and

with comparative safety, to the great markets of Central and Eastern China, the imports would increase with the reduced rates of freight, and foreign goods laid at the door of a population to all appearance eager to receive them; the terrible scourge, finally, attending the failure of the crops, would in future be reduced so as to have none but a temporary effect. This truly magnificent prospect is by no means reduced in magnitude, if we attempt to bring it down to plain figures, as well as the scarcity of available data will allow to do without exaggeration. I have shown in another page, that, taking cotton as the basis of calculation, the imports to Sz'-chwan on the Yang-tse amount probably to, at least, 600,000 piculs a year, and the exports to more than double* that figure. It is certainly no over-estimation, if we put the sum total of the annual traffic on the river between Chung-king-fu and I-chang-fu at a minimum of 2,000,000 piculs, considering only the ordinary articles of commerce. The freight, from Chung-king to I-chang or Sha-sz' is, down stream, 500 cash a picul, or Tls. 4.4.0 a ton, and up-stream, from 1,200 to 1,800 cash a picul, or about Tls. 10 to 15 a ton, according to the state of the river and the kind of goods contracted for (cotton being the highest.) We are, therefore, certainly within the mark, if we adopt the sum of Tls. 500,000 as representing the freight paid annually on upward-bound goods, and the same sum for those descending the river. From Chung-king to Sü-chau, freight is 5 cash a catty up-stream, and 2½ cash down. If the total traffic on that portion of the river is put at 1,000,000 piculs a year, the expense of freight is about Tls. 333,000. Besides these large sums paid for cargo, considerable amounts are expended for travelling, partly by merchants going in passenger boats, and partly by Mandarins. The carrying traffic can therefore be safely put at Tls. 1,500,000 a year. The prospects which steam-navigation has, from a business point of view, in supplanting the frail, expensive, and unsafe native craft on this well and firmly established line of traffic, are, therefore, of no ordinary kind.

Since the time of the spontaneous labours of Captain Blakiston, very little has been done towards getting correct and reliable statements, such as are founded on exact observation and expressed in figures, concerning the capability of the Upper Yang-tse for steam-navigation, and the absolute amount of dangers and difficulties to be encountered. It cannot be expected that any practical steps in advance, in the way of real enterprise, can and will be made, so long as vague opinions only are the basis on which the risks would have to be taken. The result of all combined testimony on the subject goes to show, that a certain amount of difficulties exists which are near the limit of those which can be overcome by the existing means of steam-navigation, and may be slightly above, or slightly below it. If above, then all idea of improved communication on the Upper Yang-tse, of residence of foreigners in the interior, of rapid enhancement of the relations with Sz'-chwan must be given up for the present; if below, then the speedy extension of foreign relations in the direction of the Upper Yang-tse is certainly the most desirable object among all which concern the introduction of measures for increasing the intercourse with China, because it is the most powerful means of doing a large step in advance, with the prospect of success, before the time of building railroads shall have come. A thorough and accurate survey of the Yang-tse between I-chang and Chung-king, and, if possibly till Sü-chau-fu, is, therefore, of like importance to the foreign merchant, the manufacturer at home, the producing and consuming community of Sz'-chwan, and the Chinese Government.

If the difficulties are too great, and steamers are to be excluded from the waters of the Upper Yang-tse, then the construction of a railroad will, in the course of time, be the only means by which Sz'-chwan can hope to rise to that commercial position which is due to her. I have observed, in another chapter, that the construction of a railroad is all but impossible there, where such a connection would be looked for first,

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* That this is no over-estimation, will at once be evident, if a few figures are considered. The Tung-oil, which left Hankau in foreign vessels in 1871, amounted to nearly 300,000 piculs. If to this sum is added the quantity of the same oil imported for consumption in Hupè, chiefly Sha-sz' and Hankau, and shipped from there northward, and that which is shipped directly to Hunan, a high figure is arrived at, which may be put down at certainly no less than 600,000 piculs. If it is, then, considered, that the amount of Sz'chwan sugar sold at Hankau was estimated in the "Upper Yangtze Report," for 1868, at 270,000 piculs, and that of Tobacco at 50,000 piculs; that these same articles are largely imported to other markets; that some weighty articles, as hemp, salt, medicines, cannot be estimated, and, together with copper, spelter, and other metals, as well as opium, silk, white wax, &c., are chiefly consumed in the inland provinces, and go in comparatively small quantity to the sea, then it is quite evident, that a higher figure than that above named might be safely adopted to represent the bulk of the downward-bound trade between Chung-king-fu and I-chang-fu.

namely in the line from I-chang to Chung-king, and from there to Ching-tu, and pointed out, that explorations, when the time for them shall have come, will have to be made in quite other places.

In conclusion, I will remark, that the merchants in the cities above Hankau, till I-chang, are in so close relations with those of Hankau, as to be fully conversant with the practical advantages of steam-navigation, and would avail themselves of these at once on its introduction. When I reached I-chang-fu, on the 2nd of May, I found it confidently expected by the population, that in the fifth Chinese month steamers would commence to run between Hankau and I-chang, and foreign merchants take their residence at the latter place. The boatmen pronounced openly their usual and perfectly natural dissatisfaction, but the merchants did not conceal their perfect approbation, and appeared to delight in the prospect of having rapid and safe intercourse with Hankau, of seeing a visit to that city reduced from an adventurous journey of two months to a pleasure trip of a few days, and were convinced that the commerce of I-chang would rise to a more flourishing condition. At Chung-king-fu, the merchants are familiar with the fact, that the proposition of extending steam-communication so high up the river has been made. There they know less, what they may have to expect from such an innovation. But as soon as steamers go to I-chang, it will be their turn to awake gradually to the conviction, that the improvement of intercommunication means increased facilities and safety, and would confer incalculable blessings upon the country in which they live.

I have the honour to be,

Gentlemen,

Your most obedient Servant,

F. v. RICHTHOFEN.

APPENDIX.

I BEG to add to this letter a few notes which are not immediately connected with its contents. They are called forth by the way in which, in a book just under the press, several statements contained in one of my previous letters (Letter on Honan and Shansi), are criticised.* As the purpose of the criticism appears to be, not so much to correct my statements, as to impair their character of veracity, they might, if unanswered, reflect disadvantageously upon the contents of my other letters, and, among them, of the present one. It is for this reason, that I ask your indulgence for replying as briefly as possible to the single points of the controversy.

1.—On p. 141 to 143, the question is discussed, whether the people of Honan are goodnatured or not, and whether the country is populous. I beg to remark, that I gave both statements as the humble results of the impression I received on the road which I took, and do not believe that they are invalidated, as regards the character of the people, by those of travellers who visited other portions of the same province; while the fact of the depopulation and devastation of the country, as reported to the Throne by the Lieut.-governor of the province (according to Mr. Henderson's statement), were also mentioned by myself, though in regard to those districts only which were actually concerned, and not in that style of generalization, which it may have been in the interest of that officer to adopt.

2.—On p. 143, it is asserted that one crop of wild silk-worms is raised in Honan, and not two as I have reported. I have my statement from the growers themselves, whom I visited in their oak-plantations, on geological rambles through the hills between Nan-chau and Lu-shan-hien, in Honan, both of which places were, as far as I am aware, not visited by Mr. Henderson.

3.—On p. 143 to 145, my statement, that Tau-kou-chin—(Mr. Henderson adopts the spelling Tan-kow-ching, which is an often-repeated clerical error in my letter)—*is said to be* reached from Tientsin "by easy navigation," although corroborated by the testimony of Mr. Oxenham, is put at ridicule, because Rev. Mr. Williamson found in some portions of the Grand Canal no more than four feet of water. As the addition of this observation is all the new light thrown upon the subject by Mr. Henderson, it is difficult to discover how my remark should be invalidated. The author's experience on Chinese rivers is probably limited to steamers, because he would otherwise be aware, that most of the great rivers of China, which are considered by the natives as easy of navigation (as the Han, the Siang of Hunan, the Kan of Kiangsi, the Canton North river) have a less minimum depth of water than 4 feet. There can be no doubt whatever, that the importance of Tau-kou-chin as a market place is due to its connection by water, at all seasons, with Tientsin (a distance of 1,200 *li*), and that Siu-wu-hien, 170 *li* higher up the Wei River, can be reached by boat at high water. The navigation is only done by Chinese, and they call it easy.

4.—The next invective, on p. 145 to 147, is, like the foregoing ones, directed against statements which it was hardly within Mr. Henderson's province to refute, because he did not visit the localities concerned. I have mentioned, that the actual produce of the coal mines at the foot of the Tai-hang-shan (in Hwai-king-fu, Honan) is probably not far from 200,000 to 300,000 tons a year. Mr. Henderson takes the trouble to calculate, that 5,479 mules and donkeys would be required daily for carrying that amount of coal, and, by feeding his imaginary mules with 15 catties of grain and bran a day, and his donkeys with 8 catties of grain (6 and 3 would be considered full rations), arrives at what he considers astounding figures of the quantity of food which these animals would consume. The basis of these calculations is completely withdrawn if it is considered, that the transportation in that nearly level country is done, almost altogether, by wheelbarrows and large carts. The figure which I have given for the extraction of coal is based on observations such as the following: the number of buckets of coal raised in a certain length of time at one or other of the mines; the number of mines at work (making allowance of their difference of yield); the number of barrows, carts and donkeys met by me on the chief roads in a certain length of time, or passing a certain inn, etc.

5.—The same mode of calculation, based on imaginary mules and donkeys fed with undigestible rations, is applied in an attempt made on p. 147 and 148 to crush my estimate that "no less than 150, and probably as much as 300, tons of freight are carried daily over the road from Tse-chau-fu (Shan-si) to Hwai-king-fu (Honan,) from north to south" (p. 15 of my letter.) Mr. Henderson gives poor evidence of his appreciative spirit of the labours of others if, without having been to the place concerned, and without any other commentary but those mules etc., my figures are disparagingly spoken of as "these rather loose calculations;" and it appears to me that the last sentence given by him on p. 147 expresses the best maxim for those who try only to find fault with others, without being in the position to improve. The transportation on that road is done by men and animals, in nearly equal proportion as regards the weight of the freight; but men predominate much as regards numbers, consequent on the over-population of the department of Hwai-king-fu, a fact so seriously doubted by Mr. Henderson. Boys of 12 to 14 years are already engaged in the carrying. My figures, representing the estimated amount of the total freight, were derived from carefully counting, within certain intervals, the number of men and animals which I met within a certain space of time. I will mention only one of these figures. At noon, when the traffic was liveliest, I met, in the space of 20 minutes, 102 mules and 108 coolies carrying full loads. If the load of a mule is taken as 200 catties, and that of a coolie as 75, I passed 19 tons of freight in that short space of time.

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* The book is written by Mr. Henderson, and is inscribed "Notes of a walk from Hankow to Peking in 1871." One-half of the second part of the book, commencing with p. 141, is devoted to the lengthy controversy. I was allowed, by the courtesy of the publisher, to see the proof-sheets as far as finished (p. 141 to 154) and the manuscript which contains the remaining portion of the criticism.

6.—I will not tire you with a discussion of the objections raised on p. 148 to 150 against the figures which I have given for certain altitudes in Shansi. I was only in the position to present you, provisionally, rough approximations, based on the readings of two aneroids of which I know the corrections, and was not provided with the remarkable instrument, the uncompared and uncorrected readings of which enabled Mr. Henderson to give at once so extraordinarily accurate figures.

7.—Nor will I enter upon the positive declaration (p. 150, 151), that the coal of the surroundings of the valley of Tai-yuen-fu is anthracite, and not bituminous coal (which I had called it in my previous, and have done again in this present, letter.) As among the attributes of the coal from various places are mentioned: "anthracite with smoke and smell," "burns quickly," "smokes a good deal," "with plenty of smoke," &c., and as coke is said to be made of the coal, it is quite evident, that the author attaches a different and much more general meaning to the word "anthracite" than the commonly adopted one, to which I have adhered. This conclusion is fully corroborated by the sentence given on p. 153: "it will be seen there are *all qualities of coal* at Ping-ting-chow. And *all these coals* so far as seen by us *were anthracite.*"

8.—The quality and prices of the anthracite of Ping-ting-chau form the subject of discussion on p. 151 to 153; but no additional information to my own is given, excepting that, besides the great number of mines visited by me, which furnish superior coal but are far off the high road, there are several small mines on the roadside, where anthracite of an inferior quality is mined. They are opened in those places where the small seams, which are intercalated between the larger ones, crop out.

9.—On p. 153 to 155, a calculation which I made in passing (p. 21 of my letter) is criticised. Its object was, to show that, if Tientsin and Peking were connected by rail with the coal-mines of Fang-shan-hien and Ping-ting-chau, those of the latter place would, notwithstanding their much greater distance, have a fair chance of supplying both markets, because, while the coal from them could be laid down at Tientsin at a trifle below, and at Peking at a trifle above, the price which that of Fang-shan would obtain, it is superior to the Fang-shan anthracite in several respects, among which is its solidity. Mr. Henderson, in reviewing these calculations, makes his criticism culminate in the supposition, that I have taken the lowest price of the best Ping-ting-chau anthracite—viz., 10 cash per picul, or 13 cents per ton, as the basis of my calculation. There was little cause for any reprimand on such grounds, as I have taken as a basis the price of 34 cents a ton, or 26 cash a picul. However, this is for the present quite immaterial, as the chances of the Ping-ting-chau anthracite are founded: in the thickness of the coal-bed; its horizontal position and easy access; the superior quality of the coal; the fact that Ping-ting-chau is situated on the great commercial road to Shansi, Shensi and the whole west; and that from it the large and populous plain of southern Chili could be supplied with fuel; and finally, in the circumstance that rich deposits of valuable iron-ore occur with the coal.

10.—The next subject taken up by Mr. Henderson is, the amount of iron produced in Shansi. From the light in which I put my estimate, that it is at least 160,000 tons yearly, it will be seen that, far from claiming to give this figure as a contribution to accurate statistics, I have freely confessed its necessarily vague character. The object of my estimate was this, to convey to others the impression which I as an eye-witness had received of the iron trade of Shansi, and to put it down in figures for further discussion, as approximately as the few data at my command would allow. I am gratified that Mr. Henderson has opened the same, but have the conviction, that a quiet and thoughtful discussion would do more towards correcting the figure given by me than one which appears animated by a spirit of contradiction. The iron-works of Ping-ting-chau, which are situated in Lo-ping-hien, Yü-hien, and on the roads from Ping-ting-chau to both places, have, as far as I am aware, not been visited by Mr. Henderson; and as he imagines that the iron produced not only in these districts, but also that of Lu-ngan-fu, has its sole outlet in Hwo-lu-hien, he arrives naturally at an under-estimation. Lo-ping-hien sends its iron chiefly to Shun-te-fu; Yü-hien supplies partly northern Shansi; and of Lu-iron only a small portion goes north-east. Also did Mr. Henderson have no occasion to witness the transportation of iron on the road from Tse-chau-fu to Ching-wha, which I estimated at 60 per centum of a daily traffic amounting to between 150 and 300 tons, or at between 90 and 180 tons daily. It is probable, that this figure can be taken as an average on that road, because the manufacture of iron continues throughout the year. I put the produce of Tse-chau-fu (inclusive of Lu-ngan-fu) at 200 tons a day. But I am now convinced that this estimate is too low, because a large portion of the Lu-iron goes eastward, to Chang-te-fu and Tsz'-chau, and another portion to Tai-yuen-fu and northern Shansi. Mr. Henderson shows that the produce of ten smelting establishments which he saw at Yang-ching-hien, amounts to three and one-fifth tons daily. We are, through this statement, not nearer the truth than before, in regard to that district, because there may be a great many other establishments scattered in out-of-the-way places. Mr. Henderson is perfectly correct in stating, that at Tai-yuen-hien, in regard to which I did not gather reliable information on my first journey, iron is not made at present, the manufacture having been discontinued. But, considering that I have omitted in my calculation some places, such as I-ching-hien, which supplies Shensi, and not made due allowance for Yü-hien, and that Tse-chau-fu is probably put down much too low, I am inclined to believe, that the figure of 160,000 tons a year is by no means too high an estimate. Mr. Henderson's favourite mode of calculating the number of animals required for transportation I have shown in notes 4 and 5 to be based on imaginary assumptions resulting from want of sufficient information in regard to the regions concerned. I may, however, remark, that figures of a few thousand as applied to mules or donkeys, in a small district where they are especially needed, are nothing extraordinary, in China. I have often met hundreds in the course of an hour.

11.—As regards the value of Hwo-lu-hien as the place from which a good partion at Shansi is commercially supplied, I have adduced sufficient additional evidence in favour of this my first impression, in the course of this letter, since I had repeatedly to mention that city as the starting place of nearly all goods coming from the east, and the place of destination of those going east. Through the whole length of the province, from the frontier of Mongolia to the Tung-kwan gate, Hwolu is in the mouth of everybody, as *the* great mart of Shansi. Mr. Henderson gives it as his opinion, —"That Whylu—(this is the local pronunciation)—is merely an emporium or principally so; a few of the small merchants for Shansi may barter their iron etc. for goods at Whylu, but I do not think a large amount of business is done in this way at Whylu." I do by no means pretend to know, that a large amount of business is done "in this way," but rather conclude from my scanty information, that more of a proper commercial and commission business is done; and my opinion, that this emporium is deserving a closer study, for the purpose of getting acquainted with the commerce of Shansi, is scarcely repudiated by the weight of Mr. Henderson's statement, that actually, some years since, one of the merchants of Tientsin has been at Hwolu.

12.—The twelfth and last point taken up by Mr. Henderson is: "The Loess of Northern China." The long and interesting discussion, which is free from that spirit of animosity prevailing in his previous pages, is based on careful personal

observation and the consultation of books. The conclusions arrived at are: 1st, that the word "loam" should be substituted for "loess;" 2d, that the theory of a subaerial origin of the loess, as proposed by me, is wrong, and Mr. Henderson's own theory, which considers the loess to be a sediment formed in a estuaries and lakes, probably correct. I have already given so long an exposé of my experience regarding the loess, that I abstain from entering into further details at this occasion. Yet I beg leave for a few brief remarks. First, as regards the name, everybody is, of course, at liberty to deviate from the ordinary nomenclature; and the generalizing of the word "loam" will certainly be less objected to than that of "anthracite" (see note 7). I believe, however, to have pointed at the difference of the application of "loam" and "loess," and follow common usage in geological language (which may not be in every case identical with that applied in the Book of the Farmer) in adopting the word "loess."

As regards the second conclusion, Mr. Henderson lays great stress on his conviction, that the loess is stratified. I have already spoken on this subject; however, as I did not desire to give you a geological treatise, but wished merely to convey, in general outlines, the chief characteristics of the loess, I have omitted a great many details, among which is the fact, that the lower portions of the loess, where it rests on the underlying rocks, are almost almost always of a reddish, colour and full of rocky debris, and lack many of the peculiarities of true loess, as it occurs in the centre of the large basins. It is partly this circumstance, and partly the want of Mr. Henderson's acquaintance with the difference between ordinary loess and re-deposited loess, which are at the bottom of his objections and have made him believe that that formation is stratified. Mr. Henderson was not fortunate in quoting, in chief support of this same view, the testimony of that excellent observer, the Rev. Mr. Alex. Williamson who, in Vol. I, p. 153, 178, 331 of his "Journeys in North-China," describes the remarkable denudations in the surroundings of the Han-sin-ling pass in Shansi, where, below the cover of loess, the coal-bearing strata and certain variegated clayey beds which overlie them are exposed in deep cuts, presenting "all the hues of the rainbow." I know very well that interesting place, having visited it in 1870, and then again in Dec. 1871; the plain description by Mr. Williamson is perfectly correct, and can only by arbitrary and wrong construction be applied to the loess.

The light which the organic remains in the loess throw upon its most probable mode of origin is, I believe, not sufficiently appreciated by Mr. Henderson. I mentioned, that they consist in bones of terrestrial animals, land-shells, and impressions of roots of plants. The bones were not seen by Mr. Henderson, and I have observed them only twice *in situ*. The peasants use them as manure, but collect them when their attention is drawn to them by a money-reward. The roots of plants have only left impressions; as a matter of course, Mr. Henderson has looked in vain for the substance of them. And as regards shells, the fact that snails pass the winter below the ground, sometimes several feet deep, and leave their abodes in spring, is by no means the fortunate discovery of Mr. Henderson, but is known very generally and since very long time. It appears not, however, that it can explain the existence of shells at the depth of hundreds of feet below the surface of the ground.

I do not believe that Mr. Henderson's variation of the river-and-lake-theory, as given first in a very ingenious way by Mr. Pumpelly, brings us any nearer the solution of the question as to the mode of formation of the loess. I will not enter here upon the numerous objections to it, because they are obvious and coincide with those which I raised against all other theories which make the loess a fresh-water or marine deposit. Mr. Henderson would probably abandon his views if he had had more extensive experience in regard to the loess. That it is very limited, is evident from the fact, that he apparently takes exception to my statement that millions of human beings inhabit caves in the loess, on the ground that in all his travels he has seen no more than 300 habitations in it. Where this formation is developed, he might often have seen many thousands of them in one day.

The full description of the loess, into which Mr. Henderson has entered, will certainly be read with great interest, and the value of his contributions to its knowledge, where he adduces facts, duly appreciated.

F. v. Richthofen.

DEPARTMENT
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Confidential

No 186

Legation of the United States
Peking September 13. 1872

Frederick F. Low

to

Department of State

Subject

Audience question.

Reports the particulars of an interview with the new French Minister in which states what has occurred since his arrival, and his opinions as to the future policy.

Confidential

No 186

Legation of the United States

Peking September 13. 1872

Sir:-

An examination of the papers which accompanied my No 135 of 22c February last probably impressed upon you as they did me when I read them, that the French Government considered the Audience question above all others in importance, and that the discussion with reference to its immediate solution would be the first business of the new Ministre after he should Hon Hamilton Fish, reach Secretary of State.

reach Peking. This impression has been generally entertained by all foreign residents in the Capital and at the ports. Such a belief was considerably strengthened by intimations coming from the French Legation to the effect that, unless audience of the Emperor be conceded to M. Geofroy upon his arrival, his stay would be short in the Capital.

A few days since the French Minister called upon me, and, during the interview he alluded to the subject. He did this, he said, in order to correct an erroneous impression

which seemed to be general,
and in which I undoubtedly
shared to a greater or less extent,
as to his future course.
He denied that there was any
foundation for the reports
referred to, and then proceeded
to inform me of what had
already occurred.

In accordance with
the customs which had obtained
hitherto (the United States alone
excepted) a formal request
was made for an audience
of the Emperor for the purpose
of presenting his letters of
credence, and one from the
President of the French Republic

in

in reply to a letter which had been sent by the Emperor concerning the Tientsin Massacre; that upon being informed by the Ministers of the Yamen that the request could not, at the present time, be granted he did as all his predecessors had done; — left with Prince Kung a copy of the letter of credence, retaining the original and the letter of M. Thiers before referred to. These will not be delivered until an opportunity shall be afforded to present them to the Emperor in person

From all that was said

at

of the interview I infer that,
while the French Government
regards the solution of the Candian
question as of paramount im-
portance there is no intention
of forcing it prematurely, nor
will France undertake to do
it alone. M Geofroy concurs
in my opinion that a request
to that effect made now by
any one Government would be
certainly refused; but that a
joint or simultaneous demand
made at the appropriate time
by all the Treaty Powers repre-
sented here, would not be rejected.

The information he had
obtained tended to make him

Sanguine

Sanguine that the Emperor would declare his majority at the same time as his marriage or immediately after; he was also of the opinion that as soon as the Regency is set aside there will be entire unanimity among European Powers as to the propriety of insisting upon a definite settlement of this vexed question.

As to the former my opinions are not so decided as those of my French Colleague; in regard to the latter I have nothing to add to the views expressed in my No 135.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

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No 187 ackd One Enclosure

DEPARTMENT
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1872
OF STATE

Legation of the United States
Peking September 17. 1872

Frederick F. Low
to
Department of State

Subject

Appointment of Vice Consul at Chinkiang.

Mr Dalton having left China his certificate of appointment is returned.

The

Consul having nominated
Mr Emory for the post, and
as the services of a Vice
Consul are necessary at
once the appointment has
been temporarily confirmed
by the Minister. Asks that
the proceedings be sanctioned.

No 187 One Enclosure

Legation of the United States
Peking September 17. 1872

Sir:-

Referring to Department despatch No 85 under date of 27th June, in which was enclosed the certificate of appointment of Albert E. Salter Esq as Vice Consul at Chinkiang, I have now to inform you that Mr Salter has left China and is uncertain when he will return, if ever.

I have
the honor
to be
Your obedient servant
Hon Hamilton Fish
Secretary of State

It seems necessary that a Vice Consul should be appointed at once; and Mr Flint has nominated David Alfred Emory Esq to the place. The Vice Consul General has approved of the nomination, and I am asked to confirm it temporarily, so that Mr Emory can act pending reference of the question to the Department. This I have done. The reasons for this are as follows: The Francis Pass question is not definitely arranged; Chin-Kiang is more interested in the question than almost any other port; the Consul at Chinkang

Chinkiang and the local officials have been at variances in their interpretation of treaty rights and regulations, in which the Consul has been sustained by the Legation; the whole question is now under discussion in Peking and I have requested Mr Consul Flint to come to Peking for personal consultation; his visit to be of any service must be made at once before Winter sets in; he cannot absent himself from his post unless some person is left to act in his stead, as the business of the port requires

requires the Consul's services daily.

In view of these considerations I beg to return Mr Salters Certificate of Appointment; and, have, most respectfully, to ask that the nomination of Mr Emory be confirmed.

If Mr Flint visits Peking as requested, I have to suggest that no deduction should be made in his salary for his absence over and above the time allowed by the Consular Regulations.

I have the honor to be, Sir,
Your obedient Servant
Frederick F. Low

Enclosure

No 1. Certificate of appointment of A E Dalton as Vice Consul at Chinkiang

To all to whom these presents shall come, Greeting:

I certify, That Albert E. Salter
has been appointed the Vice Consul of the United
States at Chin Kiang, China,

with all the privileges and authorities of right appertaining to that office, subject to the conditions prescribed by law.

In testimony whereof, I, Hamilton Fish,
Secretary of State of the United States, have hereunto subscribed my name, and caused the seal of the Department of State to be affixed.

Done, at the city of Washington, this 20th day of May, in the year of our Lord one thousand eight hundred and Seventy-one, and the 95th year of the Independence of the United States of America.

Hamilton Fish

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Let this be called to [illegible] Congress
when returned to the Secretary's
table Cll Nov 27 -

Mr Bird

No 188

DEPARTMENT
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OF STATE.

Legation of the United States
Peking September 19 1872

Frederick F. Low

to

Department of State

FOREIGN Relations '72

Subject

Chinese Indemnity Funds.

Recommends its appropriation and use in educating Interpeters.

Reviews a Bill of the H^s of Reps and suggests that it be amended so that it will meet the case.

No 188

Legation of the United States.
Peking September 19. 1872

Sir:-

The proper disposition of the surplus of the Chinese Indemnity Fund has been a topic of discussion, both in and out of Congress, for ten years or more. The dispatches of my predecessors in office and the Presidents' messages have contained earnest recommendations that this

Hon Hamilton Fish
Secretary of State

this money should be devoted to the establishment and support of a school in China for the education of a certain number of our own citizens in the Chinese language and literature, and a corresponding number of Chinese in ours.

About a year ago I had the honor to address you upon the same subject in which the plan referred to was respectfully urged upon the attention of the Department and Congress. (See Dip Correspondence 1871 pp 226 & 227) Since these memorials have, I observe, been addressed

to Congress by Colleges, Societies, and Committees of citizens in various sections of the United States, all, so far as I know, endorsing and advocating the same thing, substantially.

Since the adjournment of the last session of Congress I have been placed in possession of a copy of a Bill (H R No 2849) in which the disposal of this fund is provided for. It appears that the Bill in question was, on May 20 1872, reported to the House by its Committee on Foreign affairs, ordered printed and recommitted.

It

It will, it may be presumed, come up for final action at the next session of Congress.

Were the Bill in its present form to become a law it would not be likely to accomplish the result which those more immediately acquainted with the subject so earnestly desire. Were it permissible I would not only suggest but warmly recommend that the Bill referred to be amended by striking out the first and second sections and a portion of the third down to and including the word "them" in the

the 3d line. Were this done the Bill would then provide for the disposition of the fund in a simple yet comprehensive manner, which could hardly fail to secure important advantages to China as well as the United States.

The reasons for this suggestion are:

1st The absence of any valid reason for reopening the "Caldera" case. That claim was properly adjudicated, with many others, and the award which was made was and is considered by those most conversant with

with the facts an extremely liberal one. The written opinions of the arbitrators on file in the Department, and Mr Burlingames despatch of Nov 18 1863 (See Dip Correspondence 1864 part 3 pp 306-7-8) contain what would appear to be conclusive evidence on this point. And besides if this case be reopened there is no apparent reason why all the claimants of indemnity may not with propriety make a similar demand. Were all these claims to be readjudicated

its

it may be doubted whether any surplus would be left.

2c The Chinese Government have no legal claim to the surplus in question. If an equitable claim exists, which I am quite free to admit is the case, the appropriation of the fund in the manner suggested will discharge the obligations better than it can be done in any other way. Were the offer made as provided for in the second section of the Bill it would, without doubt, be accepted.

3c

3d. The need of competent Interpreters and Translators in the Legation and the Consulates grows more apparent. This subject has been brought to the attention of the Department and Congress by my predecessors and myself, and although these representations have been endorsed and commended to the favorable consideration of Congress by the Department and the Presidents, they have failed to secure the much needed legislation. Unless the fund in question can

can be utilized in some manner such as has been proposed it is not unlikely that the public interests will continue to suffer for some years from the lack of a competent staff in the Legation and the Consulates.

Even if Congress should make provision for the employment of additional interpreters the difficulty will be to find persons fitted for such positions. Until arrangements are made for educating our own citizens for the work no

will

will be compelled to employ either Europeans or Chinese, as is generally the case now. The objections to filling such responsible and confidential positions with aliens must be obvious to all who will give the subject a moments thought.

If the future trade of China and Japan is of prospective value sufficient to justify the Government of the United States in granting a mail subsidy of one million of dollars annually, of which no one acquainted with the subject can for

a

a moment doubt, it would seem that the moderate additional expenditure necessary to put the Legations and Consulates in these Countries upon a respectable footing ought not to be withheld.

To foster and extend Commerce and trade, relations of amity, good will and confidence should be cultivated with this government and people. No one thing would tend so much to promote this, and at the same time facilitate intercourse and advance material interests, as the education of a

Corps

corps of interpreters. Were there reason to expect or even hope that this would be provided for by a direct appropriation I should offer no objection to the return of the Indemnity Fund to the Chinese. In the absence of any reasonable ground of hope in this regard I am anxious to see the fund applied as has been suggested.

This whole subject has engaged my attention since the day I arrived in China. My opinions are the result of experience, and are very decided; and if they are stated

stated with the unbecoming plainness and force my apology must lie in the fact that the needs of the service are too apparent to be overlooked by me, while the remedy lies with Congress alone. The means are at hand to supply the want; all that is necessary is, for Congress to apply them in the proper way.

I have the honor to be
Sir,
Your obedient Servant
Frederick F. Low

DEPARTMENT
RECEIVED
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OF STATE.

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rec'd copy to Min Dept
Ack'd Nov 23
Dis 28 Nov
H. Bridam

No 189 Two Enclosures

Legation of the United States
Peking September 21. 1872
Frederick F. Low
to
Department of State

Subject

Receipt of a despatch and the sending of Medical Statistics.

Acknowledges receipt of Dept despatch No 90: Sends two Copies of the Medical Statistics for the half year ending March 31/72

No 189 Two Enclosures

Legation of the United States
Peking September 21. 1872

Sir:-

I have the honor to acknowledge the receipt of your dispatch No 90 of 22c of July last.

Herewith I beg to send two copies of the Customs Gazette No XIII Part VI, containing medical statistics of the Treaty Ports and Peking, China, from Sept 30 1871 to March 31st 1872

In conformity with Hon Hamilton Fish instructions Secretary of State

instructions two copies are
~~Sent~~ sent: one for the files of
the Department, and the other
for the medical bureau of
the War Department.

I have the honor to be
Sir,
Your obedient Servant
Frederick F. Low

Enclosures
No 172 Two copies of the Customs
Gazette No XIII Part VI

Enclosure No 1
Despatch No 189

CUSTOMS GAZETTE.

No. XIII.—JANUARY-MARCH, 1872.

PART VI.

MEDICAL REPORTS FOR THE HALF YEAR ENDED 31ST MARCH, 1872,

BEING No. 3 OF THE SERIES.

PUBLISHED BY ORDER OF

The Inspector General of Customs,

SHANGHAI:

PRINTED AT THE CUSTOMS PRESS.

MDCCCLXXII.

Pamphlet No 1
1917 — Pamphlet No 1

CUSTOMS GAZETTE.

NO. XIII.—JANUARY-MARCH, 1872.

PART VI.

MEDICAL REPORTS FOR THE HALF YEAR ENDED 31ST MARCH, 1872,

BEING No. 3 OF THE SERIES.

PUBLISHED BY ORDER OF

The Inspector General of Customs,

SHANGHAI:

PRINTED AT THE CUSTOMS PRESS.

MDCCCLXXII.

Inspector General's Circular No. 19 of 1870.

Inspectorate General of Customs,
Peking, 31*st December*, 1870.

SIR,

1.—It has been suggested to me that it would be well to take advantage of the circumstances in which the Customs Establishment is placed to procure information with regard to disease amongst foreigners and natives in China; and I have, in consequence, come to the resolution of publishing half-yearly in collected form all that may be obtainable. If carried out to the extent hoped for, the scheme may prove highly useful to the medical profession both in China and at home, and to the public generally. I therefore look with confidence to the co-operation of the Customs Medical Officer at your port, and rely on his assisting me in this matter by framing a half-yearly report containing the result of his observation at.....upon the local peculiarities of disease, and upon diseases rarely or never encountered out of China. The facts brought forward and the opinions expressed will be arranged and published either with or without the name of the physician responsible for them, just as he may desire.

2.—The suggestions of the Customs Medical Officers at the various ports as to the points which it would be well to have especially elucidated, will be of great value in the framing of a form which will save trouble to those members of the Medical profession, whether connected with the Customs or not, who will join in carrying out the plan proposed. Meanwhile I would particularly invite attention to—

a.—The general health of.....during the period reported on; the death rate amongst foreigners; and, as far as possible, a classification of the causes of death.

b.—Diseases prevalent at.....

c.—General type of disease; peculiarities and complications encountered; special treatment demanded.

d.—Relation of disease to { Season. / Alteration in local conditions—such as drainage, &c. / Alteration in climatic conditions.

e.—Peculiar diseases; especially leprosy.

f.—Epidemics { Absence or presence. / Causes. / Course and treatment. / Fatality.

Other points, of a general or special kind, will naturally suggest themselves to medical men; what I have above called attention to, will serve to fix the general scope of the undertaking. I have committed to Dr. R. Alex. Jamieson, of Shanghai, the charge of arranging the reports for publication, so that they may be made available in a convenient form.

3.—Considering the number of places at which the Customs Inspectorate has established offices,—the thousands of miles north and south and east and west over which these offices are scattered,—the varieties of climate,—and the peculiar conditions to which, under such different circumstances, life and health are subjected, I believe the Inspectorate, aided by its Medical Officers, can do good service in the general interest in the direction indicated, and, as already stated, I rely with confidence on the support and assistance of the Medical Officer at each port in the furtherance and perfecting of this scheme. You will hand a copy of this Circular to Dr.....and request him, in my name, to hand to you in future, for transmission to myself, half-yearly reports of the kind required, for the half-years ending 31st March and 30th September—that is, for the Winter and Summer seasons.

4.—That the Medical Officer at your port may know who are the other members of the profession with whom he is invited to join in this work, I append a list of the officers at each port or place.

Peking,	Dr. J. Dudgeon.
Newchwang,	Dr. J. Watson.
Tientsin,	Dr. J. Frazer.
Chefoo,	Dr. Carmichael *(a)* and Dr. Myers.
Hankow,	Dr. A. G. Reid.
Kiukiang,	Dr. G. Shearer.
Chinkiang,	———
Shanghai,	Dr. Barton, *(b)* and Dr. Galle.
Ningpo,	Dr. R. Meadows *(b)*.
Foochow,	Dr. J. M. Beaumont.
„ Pagoda Anchorage,	Dr. Somerville and Dr. Sherwin.
Amoy,	Dr. Jones and Dr. Müller.
Tamsui,	Dr. L. H. Franklyn.
Takow,	Dr. P. Manson.
Swatow,	Dr. Scott.
Canton,	Dr. F. Wong.
„ Whampoa,	Dr. R. Shillitoe *(b)*.

I am, &c.,

(signed) ROBERT HART,
I. G.

The Commissioners of Customs.—*Newchwang*, *Tientsin*, *Chefoo*, *Hankow*, *Kiukiang*, *Chinkiang*, *Shanghai*, *Ningpo*, *Foochow*, *Amoy*, *Tamsui*, *Takow*, *Swatow*, and *Canton*.

(a) Absent. *(b)* Resigned.

SHANGHAI, 10*th August*, 1872.

SIR,

IN accordance with the directions of your despatch No. 6 *A* (Returns Series) of the 24th June 1871, I now forward to the Returns Department of the Shanghai Office the following documents:—

A.—Report on the Health of Peking, pp. 7–9;

B.—Report on the Health of Newchwang, pp. 10–15; each of these Reports relating to the April–September half year (1871).

C.—Report on the Health of Newchwang, pp. 16–18;

D.—Report on the Health of Canton, pp. 19–21;

E.—Report on the Health of Amoy, pp. 22–33;

F.—Report on the Health of Takow and Taiwan-foo, pp. 34–36; each of these Reports relating to the October–March half year.

G.—Report on the Sanitary Condition of Chefoo, pp. 37–42.

H.—Report on the Health of Hankow, pp. 43–54;

J.—Report on the Health of Swatow, pp. 55–57; each of these last two Reports relating to the October–March half year.

K.—Report on cases treated at Kiukiang during the half year ended in June; pp. 58–65;

L.—Memorandum on Steppe Murrain in Shanghai, pp. 66–76.

M.—Report on the Health of Shanghai, pp. 77–86; this Report relates to the October–March half year.

N.—Addendum to Peking Report, giving a brief sketch of the Health of the capital during the October–March half year.

I have the honour to be,

SIR,

Your obedient Servant,

R. ALEX. JAMIESON.

THE INSPECTOR GENERAL OF CUSTOMS,
Peking.

The Contributors to this Volume are—

J. DUDGEON, M.D., M. CH.,	Peking.
J. WATSON, M.D., L.R.C.S.E.,	Newchwang.
F. WONG, M.D., L.R.C.S.E.,	Canton.
AUG. MÜLLER, M.D.,	Amoy.
P. MANSON, M.D., M. CH.,	
D. MANSON, M.B., M. CH.,	Takow and Taiwan-foo.
W. W. MYERS, M.B., M. CH.,	Chefoo.
A. G. REID, M.D., F.R.C.S.E.,	Hankow.
E. I. SCOTT, L.R.C.S.I.,	Swatow.
G. SHEARER, M.D., L.R.C.S.E.,	Kiukiang.
E. HENDERSON, M.D., L.R.C.P.E., L.R.C.S.E.,	Shanghai.
R. ALEX. JAMIESON, M.A., M.D., M.R.C.S.,	Shanghai.

A.—Dr. John DUDGEON'S Report on the Health of Peking for the half year ended 30th September, 1871.*

DURING the six months under review, there were two deaths among the foreign community of the capital, one, a Russian lady, from puerperal fever, the other, a British subject, from typhus fever. Fever, as I will shew in a subsequent Report, is the most fatal of all the ailments to which foreigners are here subject; it is likewise, after small-pox, the most prevalent affection among the Chinese. It is called by them the hot disease. The fatal case of typhus above referred to was distinctly traceable to the opening and cleaning of a drain in the Legation, which the deceased undertook to superintend. He took ill almost immediately thereafter and died within six weeks of the exposure. Numerous cases of low continued fever are seen yearly in summer.

Diphtheria was not absent during the whole summer, although it did not exist in an epidemic form. I have, in a few cases that came under my observation, used lime water and tincture of iodine for brushing the throat, with considerable success.

Carbuncles are at all times very frequent among the Chinese, but I have been struck this summer by their size and number. They have been situated almost entirely on the posterior part of the trunk and neck. The largest was nearly one foot long by eight inches broad; the smaller ones averaged about four inches in diameter. Crucial incisions were freely and deeply made, to allow exit for the pent-up pus, and the sloughing and dead tissues were unsparingly removed with the knife. The individuals so attacked were beyond the middle period of life, and were in a debilitated condition. The mortality was of course very great. Those at the back of the neck were distressingly large. The patients never demurred to the free use of the scalpel. Having already suffered for 15 or 20 days, and having tried unsuccessfully all the native nostrums, they were anxious to obtain relief, and seemed to be aware of the propriety of having such accumulations of pus evacuated.

The popular name here for carbuncle is *shang* or *hia ta* (上,下搭), according as it is situated in the upper or lower part of the back. The term *ta pei* (搭背) is also used, but the proper book expression is *fah pei* (發背), denoting an issuing or springing forth of the spinal column. It is classed among the cancerous, malignant and other sores. Several varieties are mentioned and named according to their locality on the body.

In the spring there was a considerable tendency both among foreigners and natives to erysipelas, mumps, tonsilitis, and sore throat generally.

But by far the most common affection during the period under review was *ague*, and a reference to the rainfall, and abstract of thermometrical observations, with my remarks thereupon, which follow below, may throw some light upon the greater prevalence of this disease this year than at other times. It is usually the rarest of diseases. Of all classes of disease seen at the Peking Hospital in 1864 and 1865 ague formed each year only one per thousand; in 1866, four per thousand; and in 1867, five per thousand, which was the highest rate during ten years. In that year (1867) there was an unusually large fall of rain in August and September.

The popular name here for ague is *yau tse* (瘧子). The character 疟 is not found in MORRISON'S Dictionary, although it is in KANGHI'S. The book name is *niŏ chi* (瘧疾), so called, according to a medical writer of this dynasty, from its resemblance in its treatment of people to a harsh and cruel man. Several kinds of ague are specified in Chinese medical works. The principal are the following, ranged according to their causes, wind, 風; cold, 寒; heat, 熱; damp. 濕; phlegm, 痰; food, 食; excessive exertion of body or mind, 勞; spirits (devils), 鬼邪; epidemic, 疫; pestilential vapours issuing from deep valleys, 瘴; and old

* This Report and the following should have appeared in the last volume, but were received too late. R. A. J.

ague, 瘧. The latter is caused by phlegm, water and bad blood getting coagulated into one lump, which is buried in the body, and which becomes enlarged and painful. This kind is well known as *mother ague*.

The kind called *kwei* or *hsieh* is caused by a person, especially from a distance, sleeping or watching in a room with a corpse. He is afterwards seized with cold and hot attacks and has bad dreams. MORRISON, I think, is wrong in stating that this form relates to irregularity in the time of the fits.

The symptoms of ague are minutely and very correctly described in all Chinese Medical books from 2600 B. C. down to the present dynasty. The cause of the cold and hot stages is traced to a want of harmony between the two principles in nature, the *yin* and the *yang*. The former represents the cold, the latter the hot period. In the one case the *yang* is conquered and the *yin* prevails, which ushers in the shivering stage; the two principles meet again, and this time on the outside of the body, and fighting again ensues, when the *yang* conquers or prevails over the *yin*. When the yang is very weak the cold period is intense and the very bones become painful; when the yin is weak, there is great external and internal heat, and thirst ensues, with quick breathing. In the yin stage the pulse is slow; when the yang comes, the pulse is quick. If the pulse be short it has been injured by food, if slippery it has been caused by too much phlegm, etc., etc.

ABSTRACT of Thermometrical Observations taken in the open air at Peking, facing the North, from 1st April to 30th September, 1871, with Negretti and Zambra's Self-Registering Thermometers:—

1871.	MAXIMA.		MINIMA.		AVERAGES.		RAIN FALL.		SNOW FALL.	
	Day.	Night.	Day.	Night.	Day.	Night.	Days.	Amount.	Days.	Amount.
April,	85°	57°	58°	32°	71°	43°	2	⅛ inch.	1	⅛ inch.
May,	100°	69°	67°	43°	84°	52°	4	¼ "	...	...
June,	100°	74°	72°	59°	90°	66°	6	3¾ "	...	...
July,	98°	77°	83°	62°	91°	72°	15	17⅛ "	...	...
August,	96°	77°	74°	55°	88°	71°	11	9 "	...	...
September,	91°	70°	58°	43°	75°	59°	10	11½ "	...	...

Remarks on the above Table.—An admirable sketch, illustrated by a photograph of a drawing of the floods which have inundated North China, will be found in the Customs Gazette for the quarter ended September 1871. Much of what is there said of Tientsin and its neighbourhood applies with equal force to Peking, thus rendering it unnecessary to enter into details regarding the extent of the inundation in this province. I will therefore refer only to the capital, leaving the reader who desires further information to consult Mr. HANNEN's report. Much may be learned by a glance at the above table.

Our unprecedented rains began on the 6th July. On the 8th a shower of hailstones, the largest being about the size of walnuts, fell in various parts of the city. During 18 hours of the 9th and 10th it rained 6½ inches; it cleared up on the 12th but began again on the 13th, and rained more or less without intermission until the 20th. On the 15th it rained 3 inches in about two hours, such as it had never before been known to rain. Towards the Western Hills the rain on this occasion was much less severe. On the 26th July it rained ½ of an inch, making in all for this month 15 days of rain and 17½ inches of fall. On the 4th August, it began again and rained till the 10th. On the 31st it rained 1½ inch. The rain during this month was more severe towards the Western Hills. On the 12th September the third and last great rain began and continued for 7 days. During these three months the fall of rain exceeded 3 feet.

The condition of the city during and after these rains was indescribable. Large portions were, of course, under water; communication was almost impossible; trade was well nigh suspended. The portions above water were likewise impassable from mud and tumbling houses or walls. The roads outside the city, at all times the beds of streams, had now assumed the dimensions of rivers, and could boast of a depth in some places of 16 feet. Several foreigners in carts and on horseback, in the proximity of the Western Hills, at the first onset of the rains, narrowly escaped with their lives. There the waters came down with a velocity

and volume almost inconceivable. Mud houses everywhere, of course, resolved themselves into their original constituents. Many houses that were never known to have leaked before, leaked now. Hardly a house escaped damage. Quite a large number of lives were lost from falling walls and houses, and a few also from drowning. The last rain came very inopportunely in the middle of the millet harvest, and caused much of the grain to germinate. A large tract of country was laid under water by the Hwĕn Ho bursting its banks, close to the bridge *Lu-kew*. The land being comparatively high here, there was no general inundation, all our water tending towards Tientsin—the meeting point of the waters of this province.

The hottest days during the past six months were the 31st of May and 5th and 8th of June, all equal; the hottest nights were the 22nd July and 3rd of August, both 77°. The three coldest days were April 19th, ½ an inch of snow and rain having fallen the previous day, and September 16th and 17th, each being 58°. The last two days were in the midst of the last great rain, and the ladies and children at the monasteries on the Western Hills, being unprepared for this sudden cold, without warm clothing and with hardly a dry inch of ground whereon to sit or lie, felt it severely, and great fears were entertained regarding their safety and comfort. The roads being impassable, and being comparatively remote from the city or any market village, supplies of food and fuel failed them for several days. The coldest nights were the 20th of April and 26th September.

Supplementary Note on Small-pox.—The views regarding the origin of small-pox expressed in my Report (No. 1 of the Series, p. 115) receive confirmation from a statement in a book on the subject, entitled *Chien chin chi pau* (千金至寶) written by a literate called Chwang (莊), a native of Hunan, in the present dynasty. He states that the first appearance of small-pox in China was in the reign known as Chien Wu (建武), *i.e.*, A. D. 317. The Emperor's name was SZ-MA-YEN (司馬炎) and his posthumous name is YUEN-TI, the first of the Eastern Tsin dynasty (A.D. 317–420). This dynasty followed immediately after the three kingdoms. In a Corean medical work which I have consulted, called *Tung-i-pau-chien*, it is stated that the ancients knew nothing of small-pox and measles, but the writers believe that it took its rise somewhere about the end of the Chew and beginning of the Tsin dynasty, in other words about the year B.C. 249. But as I have before shewn, this position is quite untenable.

B.—Dr. James Watson's Report on the Health of Newchwang for the half year ended 30th September, 1871.

In my last Report I gave a short and general account of the district in which this town is situated. In the present instance, I will indicate the special characteristics of the climate during the months under review, with the state of health in and around the foreign settlement. I will then make a few remarks on the native people and their food, and I will conclude by pointing out the peculiar advantages this district possesses, and which in my opinion qualify it for becoming the sanitarium for foreigners living in China.

The months of April and May were more than usually boisterous, and it was a rare occurrence when we enjoyed a day of perfectly calm weather. The spring was in other respects pleasant, being somewhat warmer than we generally have it. The summer months were remarkably cool, and by the middle of September the weather was so cold as to necessitate the adoption of much warmer clothing than is commonly worn in that month, while several people found it necessary to have their stoves put up, although in ordinary seasons fires are unnecessary until about the end of October.

In the spring months inflamed throats, bronchitis and pulmonary affections generally were very frequent, especially among children and the younger members of the community. The increased frequency of these ailments during the months of April and May was doubtless due to the high winds which prevailed, for although the season was slightly warmer than previous ones, the effect of a less degree of cold upon the animal economy when the air is in motion, is much more severe than a greater cold when there is a perfect calm. The great dust which the high winds caused was an additional irritant to the lungs. To the prevalence of this fine, dry and gritty dust, which our windows and doors failed to keep out, coupled with the draughts in badly built houses, must be attributed the frequent relapses which patients suffering from pulmonary diseases experienced. Patients who were to-day nearly well would on the morrow be again distressed by all the acute symptoms of their first attack. In many cases these relapses occurred three or four times, notwithstanding the greatest care on the part of the sufferers, until some patients began to fear a fatality attended them, and that in spite of their good constitutions they would never get well. With the advance of summer and the abatement of the force of the wind these affections became rare. They are never altogether absent.

The summer months, June, July, August and first half of September, were as I have said remarkably cool, although on a few occasions the thermometer in the shade and out of doors stood at or about 92° Fahrenheit. Within doors the highest heat registered was 86°. The winds were light and so variable that I have noticed that they sometimes changed their direction three or four times in the course of an hour. The disease which is most frequent and severe during the warm weather is, as a rule, diarrhœa, but this summer it was comparatively rare. Numerous slight cases occurred but there was not a severe one in the settlement. There were a few cases of dysentery and severe diarrhœa among the sailors in the harbour, but of these the former were altogether, and the latter mostly, imported from the south. Diarrhœa is here most frequently induced by the sufferer from heat exposing himself to the pleasantly cool breezes which so constantly occur and which we all find so grateful in the summer. The next most frequent cause is the eating of unripe fruit. To these may be added indiscretions in diet generally; but as this last cause is unfortunately peculiar to no district, it is almost unnecessary to mention it. Unless in imported cases of dysentery, where the constitution is undermined, the disease is here very amenable to treatment. Complete rest, simple diet, a few doses of ipecacuanha and soothing injections, followed by slight astringents, have been ordinarily successful in checking the discharges. Afterwards tonics and careful living speedily restore the patient to perfect health. I find that people who during the warm weather keep out of the direct rays of the sun, wear a broad flannel belt around the bowels, and are moderately careful in diet, are seldom attacked by diarrhœa, and if they are so unfortunate as to suffer from it, one or two large doses of opium with chloroform, or sulphuric ether, coupled with the recumbent position, speedily restore them to health. Cases evidently due to gross indiscretion in diet must be treated here as elsewhere, but

even these benefit from the peculiar advantages of the climate, and the complaint seldom developes into dysentery.

But for the great prevalence and severity of complaints of the respiratory system during April and May, I should have been able to congratulate the residents upon the unusual healthiness of our settlement during this half year. As it was, the salubrity of the latter months nearly, if not altogether, made up for the inclement spring. During the half year no case of contagious fever occurred, although many suffered from febricula, principally due to the very sudden changes of temperature to which we are liable. The other diseases which occurred were such as are met with in every climate and at all seasons, and include rheumatism, neuralgia, slight affections of the liver, pleurisy, peritonitis, phlebitis (after child birth), abscess, ulcer and, most common of all, intestinal worms.

In the month of April one death occurred among the residents* and as the case affords a good example of the class of disease which terminates fatally here, I will mention a few details about it. About three years ago I was asked to see G. B. a sailor lad on board an English vessel then in port. When I saw him he told me he was better and that the suffering which had induced him to ask for medical advice had gone. As he went away I noticed something peculiar about his walk and I called him back and made him take off his shirt. I at once noticed that there was considerable curvature of the spine, and I found on pressure that it was very sensitive. It was evident that his only chance of recovery was to be found in perfect rest and careful treatment, such as he was unlikely to obtain except in one of our hospitals at home, and so I told him. The patient was somewhat incredulous, but before the ship left port his symptoms became aggravated, he suffered from pain in the neighbourhood of the spine, great weakness in the back and limbs, difficulty of breathing, &c. He found himself unfit for his duties on board, and one of our store-keepers needing an assistant engaged him. Gradually the curvature of the spine got worse, until he became completely doubled and was unable to assume the erect position even for a moment. Last winter his general health having become sadly impaired, he suffered from rheumatism from which he recovered, when suddenly one hip joint became inflamed. He was now extremely weak and emaciated. While still suffering from inflammation of the hip joint, he caught cold, inflammation of the lungs supervened, and in less than a week the poor lad died of acute phthisis. Here the direct or immediate cause of death was inflammation of the lungs, but the predisposing, and in this instance the real cause, was the spinal disease which had existed for years before he became a resident at this port. I mention these details to show that the climate had little to do with the death in this instance. It may have hastened it slightly, but it certainly had nothing to do with the origin of the spinal disease, which by weakening the system and predisposing it to inflammatory attacks was the real cause of death.

In nearly all the deaths which have occurred among residents at this port for the last seven years, some distinct organic disease has been discovered which must have caused death in any climate. The two or three instances where no such direct cause was made out, were in men who had been dissipated in their habits and had no treatment until the disease which carried them off had thoroughly exhausted their systems.

A member of a Protestant mission stationed at this port had to leave it this summer for home, because of the depressing effect on his health of the cold winter and the variable spring weather. Another member of the same mission died in the month of February last. In these cases I fear there is no doubt that the winter climate had a prostrating effect. Both were under the care of the medical gentleman attached to the mission, but I learned from them that phthisis existed in their respective families. Their cases, therefore, belonged to one of the classes of disease for which, as pointed out by me in my last Report, this climate, or rather the climate during winter and spring, is ill adapted. Few places could be better suited for phthisical patients than this province in the summer and early autumn.

* During the half year there were two deaths among the shipping. In one case a captain went to bed apparently well, but was found dead by his steward in the morning. A postmortem examination discovered disease of the heart. The other case was one of imported dysentery in a sailor.

The Chinese population, equally with the foreign residents, enjoyed immunity from contagious fevers, with the exception of small-pox, which is never entirely absent from this town and district. The Chinese were in other respects tolerably healthy, although they suffered to a certain extent from respiratory ailments, but the exceptionally boisterous character of the spring had not such a marked effect upon them as upon foreigners. A great deal of poverty was experienced during the preceding winter, which, with the bad trade of summer, caused a large amount of suffering. Under these circumstances it was to be expected that disease dependent upon improper nutrition would be more frequent than in more prosperous times, and such was the fact. Many cases of scrofula and sluggish ulcers were to be met in the streets; and beggars, who are here rare, became decidedly more common. In spite of these admissions however, the general health of the Chinese was good, if not quite up to the standard of some of the preceding years.

The people of this province are true Chinese. They use the same language, dress (slightly modified to suit the climate) and customs which prevail in China Proper. There are a considerable number of Manchu villages scattered over the province, but in everything but name and tradition these may be considered Chinese. The Chinese and Manchus freely intermarry. Foreigners are only able to distinguish a Manchu from a Chinese community by the women of the former having large feet. This province has, to a great extent, been peopled from Shantung; it is the Canada to this and other overpeopled regions in China. The race certainly thrives in its adopted home. The men are tall, large and well built. The women away from the towns and cities have clear complexions. The skin of men and women is much whiter than that of the Chinese of the south. But for the peculiar Chinese eye and general absence of hair on the face, the men might be mistaken for English if appropriately dressed. The chief employments of the people are agriculture and the trades necessary to furnish implements for the cultivation of the soil and the gathering and conveyance of the crops. There are besides large numbers employed as sailors and carters to bring the produce from the interior to the ports. The former, in consequence of the hard frost, can only work in the open months; while the latter, in consequence of the bad roads, or rather absence of roads, are only able to work in the winter, when the ground is hard as iron, and locomotion is comparatively easy. The people are, as a rule, sober, industrious, marry young, and although poor are anxious to have children. Their necessities are few and seldom unsupplied. Visitors from the south of China are struck by the general absence of those social pests, beggars, from our settlement. In country districts they are almost unknown, and even in large cities, such as Kai-chu, Hai-ching and Moukden they are by no means numerous; indeed, the impression made upon an observer is that the people are well fed and contented. It would be difficult to find anywhere a finer race of men, viewed as mere animals, than are the majority of the boatmen in the river craft and the coolies who carry loads of produce from the native yards to the loading junks, or a hardier set of fellows than those who drive the large teams from long before daylight until sunset in our winter weather. In summer the boatmen are often seen stark naked, rowing or pulling their heavily laden craft when the wind fails them, and it has often struck me when watching them that it would be difficult to find anywhere men of a finer development. I had no idea that naked man was so beautiful until I saw these strong-limbed, broad-chested fellows straining their muscles until they became sharply and clearly defined beneath the skin. That the people which this and the other provinces of Manchuria possess are capable of great endurance, and are well fitted for soldiers if properly drilled, are established facts. That they will eventually make this somewhat inhospitable country rich as they have already made portions of it beautiful, is nearly certain. They have given China rulers; they are potentially a great people, and it is highly probable that in the future they will exercise a healthy influence upon China, as in the past they have exerted a powerful sway. The people are much more friendly to foreigners than are the southern Chinese, are more honest and less cunning, and if in some respects they are also less enterprising, this may to a certain extent be explained by their comparative ignorance and poverty, both of which are gradually disappearing as the country is becoming more densely peopled and better cultivated.

The food of the people is extremely simple, cheap and nourishing. Nine-tenths of them live principally upon millet, a grain which seems to possess all the essential elements of nutrition. It is simply

boiled in water, and is very often eaten alone. Occasionally some other vegetable is boiled with the millet, more rarely a piece of mutton or bacon. The quantity of animal food added to the dish is small and is rather intended to flavour the meal than to nourish the body. When fish is cheap, as it usually is in the summer, it is eaten by the common people. The rich eat rice, (which with them takes the place of millet) fowl, mutton, bacon, fish and rarely a small quantity of millet. Beef is not much eaten, but vegetables such as cabbage, carrots, turnips, &c. are held in great repute by rich and poor alike. But for all practical purposes the food of the people is millet, and the foregoing remarks show how thoroughly this grain answers the purpose of human food. On this simple diet, a family of six people can live well for about four dollars a month. This accounts for the few beggars, as it also explains the general healthy appearance of the natives. If they will but work there is no need that they should starve; and the people here do work, and many must labour hard before they earn even such food as they eat. In addition to the solid elements in their diet, all who can afford it drink a rather coarse spirit manufactured from the millet, but so sparingly do they partake of this, that it is rare to find a Chinaman drunk. I have lived nearly seven years in this province, and have visited as many cities, but during that time I do not think I have seen more than seven Chinamen really drunk, and never a Chinawoman. It may therefore be fairly considered that here spirits, as an article of diet, are used advantageously, and very rarely abused. Tobacco is smoked by men, women and children, and I cannot say that I have noticed any distinct evil effects from the habit. I regret to add, however, that opium smoking, although far from general, is on the increase; and while I am not at present prepared to admit or contradict the opinions of those who maintain that it is an altogether unmixed evil, its consequences are so disastrous in many cases as to make all earnest men regret its increasing hold upon the people of this great Empire.

Before leaving the subject of the food of the people of Manchuria, I will narrate an experiment I made with millet in the spring of this year. I was anxious to try the effect of millet on European constitutions, and a good opportunity occurring I availed myself of it. A sailor who had been guilty of several serious offences, was sentenced to solitary confinement for 49 days in the consulate gaol. As I had medical charge of him, I requested and obtained permission to feed him solely on millet and water, on my promising to change the food at once if he lost weight or seemed in any way to suffer from his restricted diet. He entered prison on the 3rd April when he weighed 146 lbs. 8 oz., and he left it on the 22nd May weighing 147 lbs. 14 oz. Throughout his confinement he never weighed so little as on the day it commenced, and this in spite of the depressing effect of solitude and the monotony of his food. Although the nights were sometimes cold, the cell had no fire; the prisoner was, however, allowed as much warm clothing as he required. He ate about 3½ lbs. of millet daily, which he said he enjoyed, and when he left prison he looked, as he said he felt, perfectly well. This experiment is interesting as showing that the grain which has been chosen by the people as their principal food is capable of maintaining for a considerable length of time perfect health under very depressing circumstances.*

From the foregoing notes, and from what I said in my first Report, it appears that the climate of the summer months is in this province very healthy. Such a climate in a pleasant country would be a boon to foreigners in China, oppressed by the trying summers of the southern ports. It is not generally known that in this region within in some cases a few hours, and in others a few days journey, scenes

* The following figures will show the changes he underwent in weight while in prison:—

April	3rd			146 lbs.	8 oz.
„	4th	to	15th	147 „	13 „
„	15th	„	21st	148 „	8 „
„	21st	„	5th May	149 „	5 „
May	5th	„	9th	148 „	8 „
„	9th	„	14th	149 „	6 „
„	14th	„	19th	148 „	8 „
„	19th	„	22nd	147 „	14 „

The lowest of the minimum temperatures registered during the 49 days of his confinement was 26° F., the highest of the minimums was 57°.

of great beauty can be reached. Four or five hours sail from this harbour, with a fair wind, brings one to a sea coast, with a nearly continuous stretch of from ten to twenty miles of sandy beach, interrupted occasionally by rugged rocks, in which the sea has worn out great caves and massive boulders. This sandy beach impinges upon the slopes of cultivated hills rich with cotton and hemp, while the valleys beyond bear magnificent crops of peas and millet. Few sights are more beautiful than a large field of peas, presenting the appearance of a wavy sea of green extending sometimes for miles, and richly adorning the landscape. This district lies directly to the south of our settlement, and is distant about 30 miles; it extends from Kai-chu to Tower Hill, and ships passing to and from this port are distinctly seen from the cliffs above the beach. I had the temperature taken daily at Kai-chu from the 1st July until the 18th September, and the highest temperature, attained at rare intervals and for very short periods during these months in a bungalow built upon an elevation of about 100 feet above the sea, and in which windows to the north and south were continually open, was 84°. The temperature at night was, as a rule, 10° lower than the maximum of the day, but was sometimes much below this. Before the middle of September it was so cold that windows were shut during the day, and warm clothing put in requisition, and by the 19th September those who were not supplied with a sufficiency of warm clothing were glad to beat a retreat to this port. It is true the past summer was exceptionally cool. The temperature is generally about 4° cooler at Kai-chu Point than in our settlement, but occasionally the opposite is true. At Kai-chu beach very good bathing is to be had. The roads are good for riding or walking. The hills are close at hand and are not too steep or high; and thus even in summer, the holiday keeper is tempted to climb their summits, when the eye is at once refreshed and gladdened by the fine prospect of bounteous valleys and the ever moving sea, whose waves break at the base of the green cultivated slopes. The country in this neighbourhood is so admirably drained by nature, that when heavy rains occur, as they sometimes, but rarely, do, a few hours render the walks and roads dry, and exercise is at once possible and pleasant. The sides of some of the hills are covered with shrubs and young trees; picturesque villages surmounted by handsome trees are numerous, while scattered over the whole district there are small but beautiful plantations.

If a seaside resort is not a desideratum, there are many inland regions which would well repay a month's residence. Unfortunately in summer the roads are so bad that delicate people would be unable to undergo the fatigue unavoidable in travelling. It is impossible for me in these notes to mention all these places, I will therefore only invite attention to one district which has been visited by several foreigners, and in every case with great satisfaction. Between 80 and 90 miles to the north-east there are several Buddhist and Taoist monasteries built on the terraced sides of the C'hien-shan 千山. The name is poetical but appropriate. The hills consist of a congeries of whorls, every whorl being made up of a number of sharply pointed pyramidal hills, which are all clad on one side from base to summit, with oak and fir, and shrubs of different kinds. The temples, although poor as architectural specimens, afford very fair accommodation, and, as their situations have been chosen by an artistic eye, they are invariably charming. From any one of the terraces in front of the many temples, there is a beautiful view of rugged ravines, steep precipices, wooded hills, and in the valleys a luxuriance of wild flowers and shrubs; while from the summits of the higher hills a great expanse of cultivated ground bearing abundant crops greets the eye. The scenery is delightful, and it is difficult to say whether the element of grandeur or of richness is the more impressive, so admirably do the different features combine to make a pleasing and harmonious picture.

At the seaside, or inland among the mountains, the tourist simply in search of change, will find all he seeks. The sportsman will, at the C'hien-shan, find occupation for his gun, and, if fortunate, may meet with such noble game as the bear, panther and tiger. I have myself seen the tiger there. At the seaside there are occasionally a few wolves, but no foreigner has seen any; and there is little to shoot but a few wild pigeons, except in the spring and autumn when wild geese and duck abound. Travelling by road being so difficult in the summer, the seaside which I have described is the only place likely to commend itself to the sick or convalescent, but it is at least well to know that within four or five hours from Newchwang there are to be found good sea bathing and pleasant roads through the valleys and over the hills, where in the mornings and evenings the patient will find ample scope for exercise. During the months of

June, July, August and September, the climate at Kai-chu beach is not surpassed by any in the world. The exceptional dryness is moderated by the sea breeze and occasional showers, and the few days of heavy rain are only disagreeable while they last. The air never feels damp for more than a few hours at a time, and that at long intervals. The morning air is exhilarating in its charming freshness, while the cool evenings soothe and refresh the weak, and sleep, which here requires no wooing, is followed by increased strength and energy.

The foregoing remarks will seem exaggerated to those who have only seen our settlement and the immediate neighbourhood, or are familiar with the descriptions of them in the letters of correspondents of the press in China. For many miles the country round our port is very uninteresting, and at some times of the year it may deserve the description commonly given of it by visitors. It is beyond these limits that the country is full of beauty, and is endowed with the summer climate I have described. Unfortunately the absence of regular steam communication with the south renders the advantages this province offers as a sanitarium unavailable to many of those who most require them.

TABLE of extreme Temperatures and Barometrical Changes during the April to September half year.*

MONTH.	THERMOMETER.		BAROMETER.		REMARKS.
	Highest.	Lowest.	Highest.	Lowest.	
April,.....	70°	27°	30.30	29.60	The period was very dry, yet the crops were exceptionally good, and but for one early day of frost would have been superior to any we have had in this province since foreigners settled here. The weather which became very cold about the middle of September, got warmer before the end of the month.
May, ...	75°	34°	30.04	29.50	
June,.....	84°	53°	30.05	29.65	
July, ...	92°	66°	30.04	29.50	
August,.....	89°	60°	30.05	29.70	
September, ...	83°	48°	30.42	29.83	

* The thermometer was hung under a verandah on the northern wall of the Custom House. The barometer readings are taken from the instrument in the Harbour Master's Office.

C.—Dr. James WATSON's Report on the Health of Newchwang for the half year ended 31st March, 1872.

THE month of October is, as I have before remarked, an autumnal one, and it is in many respects the healthiest and pleasantest in the year. Last October was no exception to this rule. The temperature which had become unseasonably cold by the middle of September, became more genial before its close, and October was, so far as climate was concerned, a mild and agreeable month; during it there was little or no sickness.

The other five months of this half year constituted our winter. This season is always cold, but the one under notice was more severe than any experienced since foreigners settled here. The preceding summer was cold and dry. The winter was extremely cold, dry and dusty, men and animals alike suffering from the extraordinary drought. The Chinese assert that more mules and horses died during the last six months than in any similar period that they can remember, and the cause of this misfortune they assure me was the fine dust which prevailed during the greater part of the winter, and which entered the lungs and stomachs of their animals and so induced sickness and death. That the dust may have contributed to this result is very probable, but I think the extreme cold accompanied often by north-east winds, was a more potent cause and was sufficient of itself to account for the large number of deaths and the great amount of sickness which prevailed among all animals of burden.

That the human species suffers to a considerable extent from the prevalence of fine dust, I had ample opportunities of seeing during last winter. Had Chinese and foreigners not been well housed and fed, they would have suffered still more. I have never since arriving here had so many Chinese applying for relief for inflamed eyes and eye-lids, as in the last six months. That dust and wind were the cause of these affections there can be no doubt. The ordinary complaint the patient made when first seen was that his eyes were painful, but when examined the disease was generally in the eye-lids. These were greatly inflamed (granular) and the inflammation of the eye was secondary. The eye-lids were frequently quite everted (ectropium). Treatment by the free application of solid sulphate of copper was perfectly successful, and in Chinese estimation marvellous. A number of Europeans suffered from milder attacks of the same affection which yielded immediately to the usual treatment.

The only other disease which attracted special notice during this winter was an affection of the throat of which I have now met a good many instances. It rarely if ever occurs except in winter, and I have not seen it except at this port. It is sometimes associated with disease of the lungs, but this is not a necessary condition of its existence. It attacks in preference weak constitutions, but one of the severest cases I have encountered occurred in a patient whom I have known for the last seven years and who has, as a rule, enjoyed the best health and who has a robust constitution. The course of the disease is as follows:—A chill is experienced, followed by more or less severe fever which lasts generally for no more than from one to three days if the patient is under treatment and confined to the house. Discomfort in the upper part of the throat is then felt, the sensation being of something to be coughed up, and the patient attempts in vain, during the first days of the disease, to relieve himself by getting rid of it. On the fourth or fifth day after the chill, the mucous membrane at the back of the pharynx seems to have disappeared,—that is to say the membrane has lost altogether its distinctive character. The surface looks as if a dry sponge had been applied to it with considerable force and that the mucous secretion had thus been rubbed off. What remains of the membrane is dry and shining and looks tightly stretched. Soon after this dry and stretched condition of the throat has been noticed, the patient has his attention drawn to a thin white membranous exudation which in the mornings he coughs up. This exudation, at first white and thin, becomes yellowish and thick. It is now evidently the cause of the cough, for when it is gone, the cough is no longer troublesome. The mucous membrane over the roof of the mouth, tonsils and the other portions of the throat which can be seen, is either healthy quite up to the margin of the diseased surface, or is only very little inflamed, with sometimes

one or two blood vessels considerably injected running across it. The throat is not painful but is uneasy, and at night there is usually more or less loss of voice. In one instance the voice was almost entirely lost and the patient spoke with a great effort, but except in the worst cases the voice returns in the morning. I have never seen an instance of this disease in warm weather, and in my experience it has always got better with the approach of summer.

Associated with this local disease there is always considerable weakness, but I do not feel quite sure whether the disease is the result of the weakness, or the weakness is induced by the disease. Probably the weakness precedes the disease. In one of the cases which I treated last winter, the pulse became remarkably intermittent, returning to regularity after the local disease was cured; but it was many weeks before it became strong and my patient's general health good.

One distressing feature of this disease is the occurrence of relapses. In all the cases I have treated, relapses have been very frequent and without any apparent cause. The patient would seem to be getting better for a few days, as manifested by the mucous membrane becoming moist and velvety, when suddenly it would again become dry, shining and stretched, and the voice would lose its power. Up to a certain point, the membrane seems to improve, but as soon as it reaches this point a relapse occurs, and this in spite of the patient being kept in the same room night and day, and the temperature regulated so that it never varies in the twenty-four hours more than 3° or 4°. While this was going on my patients were in the best conditions for recovery,—their circumstances were comfortable, they lived in good houses and had nourishing food, they were generally able to sleep, and had little to do but to nurse themselves. The medical treatment was moreover appropriate. It consisted in the first instance of steaming the throat with hot water, a little carbolic acid being afterwards added to the water, then gargles containing opium in warm water, followed by solutions of permanganate of potash, sulphurous acid gargles, &c. In addition the throat was rubbed externally with cod-liver oil while the drug was also taken internally. I moreover prescribed various tonics, such as chlorate of potash, syrup of the phosphates, &c. I prescribed the syrup of the phosphates because there was a great excretion of phosphates by the urine, an amount out of all proportion to what might have been expected from the degree of fever which introduced the disease. The diet allowed was generous, with stimulants equivalent to three glasses of sherry per day; but I invariably confined my patient to one kind of beverage, that is if he took beer or brandy or claret, he got nothing else.

So far the result of treatment was in the long run favourable, all the cases having eventually recovered; but this result was only attained after many weeks of treatment, and was invariably coincident with the approach of warm weather. The cases improved under treatment but never got quite well until the temperature rose.

Although some of the symptoms as recorded above are common to well known diseases of the lungs and throat I think there can be little danger of mistaking the affection I have attempted to portray for any of them. The distinctive feature of this disease is the invariable presence of the unhealthy condition of the mucous membrane, which I have described as occurring at the back of the pharynx, associated, as it is almost constantly, with a perfectly healthy condition of the membrane elsewhere.

The disease which it most resembles, and yet which it differs much from, is dysphonia clericorum. None of the patients treated by me during the last winter had occasion to use their voices more than ordinary people. Of six patients treated for this affection of the pharynx during the last seven years, only one had any of the ordinary symptoms of phthisis, while three were unusually strong men.

The general health of the foreign community during the winter was fairly good. There was one death induced by deposit on the dura mater giving rise to convulsions, to which the patient had been subject for five years, the fits becoming each year more frequent and severe. In the intervals the patient, while far from well, was able to attend to his work, and twenty-four hours before his death was in his usual health.

I may here notice a case of paralysis of the bladder, evidently due to injury of the lower part of the spine received some years ago. The patient recovered under the enforcement of perfect rest and the use of the catheter twice daily for several weeks, followed by counter-irritation of the spine, and iron tonics. He is now perfectly well, or at all events the local disease is cured.

With the exception of the cases I have shortly referred to, there were no serious ailments during the half year. The larger portion of the foreign community suffered more or less from slight attacks of catarrh, but this is not remarkable when the great cold which prevailed is taken into consideration. There were besides, one case of severe neuralgia of the eye, one case of croup, two or three accidents, and a few slight ailments such as exist everywhere.

I append a Meteorological Table which gives a very good idea of the severe character of this climate during last winter.

TABLE of extreme Temperatures and Barometrical Changes during the October to March half year.*

MONTH.	THERMOMETER.		BAROMETER.		REMARKS.
	Highest.	Lowest.	Highest.	Lowest.	
1871.					In the month of January the mercury fell every night below zero, from the 12th to the 31st inclusive, and on the 22nd to 14° below zero. During the six months from October to March there were altogether 13 days on which slight showers of rain or snow occurred; the former merely moistened the surface of the ground, while the latter did little more than whiten it, except on one occasion when three or four inches fell. On the 15th February there was a great dust storm. During the winter local dust storms were very frequent.
October,.....	73°	30°	30.46	29.20	
November,...	57°	9°	30.65	29.54	
December, ...	40°	4°	30.88	30.27	
1872.					The river was frozen over from bank to bank opposite the settlement on the 29th December, and the ice broke up on the 12th March.
January,.....	36°	−14°	30.96	30.05	
February, ...	45°	0°	30.98	30.27	The prevailing winds were N.E. and N.W. There were still a few large masses of ice in the river on the 31st March, although the sun was then becoming very powerful.
March, ...	52°	6°	30.78	29.92	

* The thermometer was hung under a verandah on the northern wall of the Custom House. The barometrical readings are taken from the instrument in the Harbour Master's Office.

D.—Dr. F. Wong's Report on the Health of Canton for the half year ended 31st March, 1872.

In drawing up this Report, I have much pleasure in remarking on the excellent health enjoyed by the foreign residents during the winter. With the exception of a few cases of a somewhat serious nature, there was comparatively little sickness. The children also, who form nearly one-third of the foreign population, were remarkably healthy. They were not troubled with any of those ailments to which childhood is peculiarly liable, such as measles, whooping-cough, spasmodic laryngeal affections, &c., and scarlatina is so rare here that in 10 years I have seen only one case in a foreign child. Among the serious cases may be mentioned 1 of chronic diarrhœa (imported), 1 of enteric fever, 2 of dysentery, and 1 of hepatitis.

No death occurred.

The past winter was regarded as unusually severe, owing to the continuance of very cold weather for two months, a longer period than has been known during the last 15 years.

The general health of the Chinese population of the city was very good. There was no unusual prevalence of disease beyond what happens every winter among the natives, such as coughs and other bronchial affections, rheumatism and neuralgia, intermittent and remittent fevers, diarrhœa, &c.

There were no epidemics. Small-pox broke out in the month of February, but only in scattered instances. I subjoin a list of the diseases which have come under treatment during the last 6 months:—

Intermittent Fever,	33 cases.	Diarrhœa,	28 cases.
Remittent,	1 „	Dysentery,	4 „
Typhoid,	1 „	Hepatitis,	1 „
Rheumatism,	12 „	Congestion of the Liver,	4 „
Rheumatic Synovitis,	1 „	Sore Throat and Cynanche Tonsillaris,	9 „
Facial Paralysis,	1 „	Hemorrhoids,	2 „
Epilepsy,	1 „	Cystitis,	5 „
Neuralgia,	9 „	Orchitis,	4 „
Disordered Sensations,	3 „	Hydrocele,	1 „
Spinal Disease,	1 „	Nephritis,	2 „
Functional Disease of the Heart,	1 „	Congestion of the Kidney,	1 „
Adenitis,	6 „	Metritis,	1 „
Bronchial Catarrh,	11 „	Boils, Ulcers and Abscess,	14 „
Bronchitis,	1 „	Sprains and Bruises,	8 „
Phthisis Pulmonalis,	2 „	Diseases of the Eye,	4 „
Asthma,	1 „	„ „ Ear,	2 „
Dyspepsia,	8 „		

The above list includes cases seen among the shipping as well as among residents.

The intermittent fevers were nearly all of the quotidian type. In many of them diarrhœa was present at the same time, and treatment was directed against both. In some cases the diarrhœa ceased before the fever was cured, and in others it continued a little while after; but generally so soon as the fever was cured the diarrhœa was easily controlled. This association of diarrhœa with fever is also often met with among the Chinese. Of the four cases of dysentery that came under treatment, two were of a mild character, and the other two, of a more serious nature, were imported. I can add my testimony to the power of ipecacuanha in scruple doses in this disease.

Among the peculiar diseases seen during the last few months may be mentioned the following:—The subject was a foreigner in good health and free from nervous disease. In the cold weather, whenever he came from the open air into a warm room, he felt pricking sensations all over the body which lasted a minute or

two, and then subsided. When he walked in the streets, the same sensation came up from his legs, and gradually extended to other parts of the body. At first every part of the body was attacked, head and face, arms and legs, but after two weeks, when he got somewhat better, the pricking was confined to his legs. The sensation was excited by warmth, exercise and sudden change of temperature, and like prickly heat, was aggravated by mental irritation; but there was no prickly heat or other skin disease to be seen. The peripheral extremities of the nerves seemed to be in a state of irritation, arising from some rheumatic irritation perhaps of the nervous centres. The patient got gradually better, and is now quite well; he took some bromide of potassium, but I think he owed his recovery to time. I have seen several instances of the same among the Chinese, which gradually went away in time, but with them the stinging was more confined to certain parts, such as the back and chest, and it was not so general as in the case above mentioned. I must also add that these Chinese were subject to neuralgic affections.

Of *formication* I have seen several cases, which merit a detailed description, as I have not noticed any account of this affection in medical works. The sufferers were attacked with sensations like the crawling of ants over different parts of the body, and in the cases which came under my observation these sensations were mostly felt on the head and face, though sometimes on the arms and back and other parts of the body. The patients at first always attributed them to the crawling of insects or flies. One Chinese lady who was occasionally attacked imagined that the flowers she wore on her head attracted a number of insects there. They are not felt constantly, but come and go, except in aggravated cases, when they are felt every day, or nearly all the time with different degrees of intensity. They are apt to be worse at night, when they are sometimes so bad as to interfere with sleep. In mild cases they are felt only occasionally, in such weather as commonly produces neuralgic pains, such as a few days before the fall of rain, owing perhaps to certain electric states of the atmosphere. In severe cases, even a mass of clouds over head is sufficient to bring them on. They are excited by heat and atmospheric changes, and by causes working on the mind, as mental anxiety, emotions of fear and anger, and even by reading and writing. Cold has a soothing influence, and in cold weather they are not so much felt. I myself have seen 5 cases of this disorder, and I have heard of 6 more from good authorities. The patients were all Chinese. So far as I know, both sexes are equally liable to be attacked. Of the male patients 2 were scholars, 1 a shop-keeper, 1 a shoemaker and 1 a brewer. The general health of the patients was good, their digestive functions little impaired, and their sensibility and power of motion unaffected. In some cases they suffered only from these sensations, in others they suffered in addition from muscular twitchings and nervous pains. I have made some inquiries among the Chinese about this disease, and find that a good number of them have seen or heard of instances of it. The native physicians recommend a tonic course of treatment, and mental relaxation. In the course of time mild cases get well. One of the scholars attacked gave up his studies, recovered after one year, and went into business; and the shoemaker, after being troubled with the disorder for two years, eventually got well and married. As one form of disordered innervation, *formication* is incidentally mentioned in medical works, but I believe it is rare to see the disease so extensively developed and lasting over years. It does not seem commonly connected with any serious lesion of the nervous system, seeing that so many cases recover. In its nature it must be allied somewhat to neuralgia. In some cases it may arise from rheumatic irritation, either in the membranes or substance of the cerebro-spinal centres, by which the nerves become so affected as to lose their ordinary power of resisting atmospheric influence. Time, and whatever promotes general nutrition, mental health and relaxation, seem to be the best cure. As to medicines, I am ignorant of any at all reliable, including bromide and iodide of potassium on the one hand, and strychnine, iron and phosphates on the other.

Typhoid Fever.—During a period of more than 10 years I have seen only two cases among foreigners in Canton, one of which occurred last winter. I am not in a position to state whether or not this fever exists among the natives, or to what extent. If foreigners here are sometimes attacked by it, there is no reason to suppose that the Chinese are altogether exempt, but hitherto foreign physicians have not been afforded sufficient opportunities of seeing the fevers of the Chinese to enable them to ascertain by personal observation the rare varieties that exist among them. The natives have no faith in the skill of

foreign physicians in the cure of fever, and when taken with it they do not send for them, nor do they come to the hospital to be treated as in-door patients. The fevers seen among the out-patients are generally intermittents. From native books and physicians we can gather no distinct idea of such a disease as typhoid fever, which can only be known by the personal observation of members of the profession accustomed to its phenomena. These difficulties, which I have no reason to suppose exist more in Canton than in any other port in China, disqualify a physician from pronouncing on the presence or absence of the disease, or the exact extent to which it prevails; but they do not debar him from observing it occasionally if it is at all prevalent. With regard to myself, I can only say that, having resided long in Canton, I have had considerable opportunities of seeing Chinese fevers and many cases of remittent among them, but I do not recollect to have seen one distinct case of typhoid. It may therefore be safely affirmed that this disease is not at all prevalent, although we should expect a different state of things, as the causes that are usually supposed to produce typhoid fever are in full operation. Since the sewage question has been so much in agitation in connexion with this fever, it may be well to mention that in Canton large numbers of the native population are daily using water and inhaling air charged with the impurities of human excreta, apparently with utter impunity. River water is greatly used wherever it can be obtained, but that used by the crowded boat population along the different jetties is extremely filthy, and must be largely contaminated with human and other impurities. Although comparatively pure water can be easily obtained in the middle of the river, or a little farther from the jetties, the sampan people prefer to get it by the side of their own boats, simply because they receive no harm by the practice. They do not suffer from diarrhœa and fever more than others, but rather less. The water they use moreover bears no comparison with the filthiness of the different creeks that ramify into different parts of the city. I will, as an illustration, instance one creek which has been under my observation for some years. This creek, called San-t'sung, is not far from the foreign settlement; it is comparatively narrow and crowded with boats; on both sides of it are innumerable houses, chiefly brothels; the alvine dejections and other impurities of thousands of inhabitants along it are daily discharged into the stream; yet the water, too dirty even for washing, is daily used for culinary purposes, without being filtered or precipitated with alum, as is done in Shanghai. Here we should expect the prevalence of such diseases as typhoid fever and diarrhœa occurring often enough to excite attention; but I have been told by persons who have good opportunities of knowing these people, that they are not more subject to fevers and other diseases than others, and that this impunity is one of the reasons for their continuance in the use of such water. A detailed examination of this creek, and the disgusting habits of the inhabitants, would almost unsettle one's idea of the connexion between typhoid fever and polluted water. In the south of China, it is only in Canton that water of such a filthy character is so much used.

Chinese Prisons.—In October last I had occasion to visit a Chinese prison in this city, to ascertain the condition of four Chinese prisoners. The state of things that met my eyes spoke ill for the humanity of those who were responsible for their management. In that part of the prison called the Wee-ki, which I visited, the prisoners were kept in separate enclosures inside the building, each in charge of a number of men. I saw as many as 30 or 40 confined in spaces of not more than 15 to 20 feet square, surrounded partly by posts with inter-spaces for the admission of air. The men were crowded together like herds of sheep, the very pictures of filth, rags and misery, and the stench that issued from these dens was insufferable. Of the four prisoners, one was dying of remittent fever, and another of dropsy and diarrhœa. I learned that fever was very rife, but that some of the old prisoners live and thrive while the new comers, unaccustomed to the poisoned atmosphere, often die.

E.—Drs. Müller and Manson's Report on the Health of Amoy for the half year ended 31st March, 1872.

The past winter, like the preceding summer, was the coldest experienced for many years in Amoy. Ice, hitherto known to the inhabitants by hearsay only, was actually seen for three or four mornings in the middle of December. European flowers and vegetables, which ordinarily thrive well during the winter months, were nipped and had their growth retarded by the frost, and the sugar-cane growing on the neighbouring mainland is also said to have suffered from the same cause. The accompanying table of temperatures does not give a correct idea of the degree of cold experienced, as the instruments were not exposed outside, but were hung in a room frequently warmed by a fire; we give it however, hoping it may be of some service, as indicating correctly the maximum range of the thermometer and the ordinary in-door temperature during the season.

Table of Temperatures from 1st October 1871, to 31st March 1872.

Month.	Max.	Average Max.	Min.	Average Min.	Mean.	Days of Rainfall.
October,	86°	78.4°	70°	74.0°	76.2°	4
November,	76°	68.5°	56°	63.7°	65.5°	5
December,	68°	60.4°	39°	54.3°	57.3°	2
January,	66°	58.0°	48°	52.7°	55.3°	3
February,	61°	56.9°	45°	50.0°	53.4°	3
March,	72°	63.6°	49°	57.8°	60.7°	7

Generally speaking our winter climate would compare favourably with that of the most popular health resorts on the Mediterranean. The prevailing high winds are possibly a drawback, and they are especially troublesome at the beginning of the monsoon when the temperature is still high. Then the sudden outburst of a north-easter may cause a rapid fall in the thermometer and, catching one unprepared for cold weather and still in summer dress, give rise to a chill apt to induce in those predisposed a congestion of the liver, or a catarrh, or to reawaken an old ague. The monsoon once fairly established, however, the temperature becomes more equable, rain seldom falls, the sky is clear and the air very dry and bracing. The N. E. monsoon may be said to blow from the beginning of October to the middle of April. Its strength is spent by that time, although we have northerly winds prevailing up to the beginning of June.

Malarious diseases, though they do occur, are of much less frequency than during the summer. As the cold is never intense or even unpleasantly felt by a healthy European, exercise may be freely taken, and coughs and colds avoided with ordinary care. Acute disease of the respiratory organs is extremely rare; pneumonia and severe bronchitis are almost unknown among resident Europeans. Poitrinaires are common here as elsewhere, but they can live during the winter months in comfort with little trouble and few precautions.

The general health of the community did not suffer by the unusual cold of the past winter, but, on the contrary, we believe was rather above the average. A few very mild cases of catarrh occurred amongst the children who never before in their lives had experienced cold so severe. A trivial epidemic of mumps prevailed amongst them during January and February and may have been partly induced by the severity of the winter. One or two adults were also attacked. The same disease was common at the time amongst the Chinese, as it usually is about the beginning of the year.

Two deaths happened amongst the residents, one from apoplexy and hemiplegia, the other from aneurism of the aorta.

The subject of the aneurism had for several years been labouring under albuminuria and disease of the kidneys; he had lived in China for many years, gone through a great deal of hardship, and was well advanced in life. Symptoms of aneurism did not show themselves until about the middle of last summer. At first, attacks of dyspnœa happened every few weeks, coming on usually on his getting out of bed, and lasting for three or four hours; he also complained of breathlessness in ascending a hill or stair. Gradually the attacks of dyspnœa became more frequent, more severe in character and lasting longer, and for a week or ten days before his death confined the patient to bed. Death occurred suddenly during one of these paroxysms from profuse hæmoptysis. A postmortem examination revealed an aneurism of the back part of the transverse aorta, about the size of a small orange, pressing on the recurrent laryngeal nerve, and opening into the trachea by a transverse slit half an inch in length. Both kidneys were extensively diseased, and the arteries were everywhere more or less atheromatous.

The subject of apoplexy was a Hindoo. His body was not opened.

From the 1st of October to the 31st of March inclusive, there entered this port 123 sailing vessels, with crews consisting of 901 Europeans, 294 Malays and 213 Chinamen, giving an average of 11.4 as the crew of each vessel. The total number of days these were under observation was 2,000, giving an average stay of little more than 16 days to each vessel. The total number of cases treated was 162, of which 73 were sick on arrival, leaving 89 cases of sickness acquired in port.

As may be seen from the annexed list, by far the greatest contingent is furnished by enthetic diseases, intermittent fevers and diarrhœa coming next. The rest of the cases were principally of a very trifling character.

Two fatal cases occurred among the floating population, one from typhoid fever, the other from softening of the brain and paralysis.

The fatal case of typhoid fever is deserving of some notice. The patient, second mate in a French brig, arrived here, as near as we could judge, in the first week of the disease. The ship had sailed from Yokohama, viâ Chefoo, about 18 days before. The patient had all the symptoms of typhoid fever well marked, the characteristic diarrhœa, gurgling over the cæcum, a pulse of 110–124, with a temperature of 104°. When admitted we also observed a few rose coloured spots on the abdomen. The pulse and temperature were lowered by six baths of a temperature of about 80° gradually cooled down to 70°. In the course of the first 3 days after admission the pulse fell to 80–90, and the temperature to 98°–100°. From this time the disease ran a mild course, the patient taking nourishment very fairly, until about the 21st day of the fever, when bronchial symptoms, which in a very trifling degree had existed for about a week before, became suddenly aggravated to intense dyspnœa, the pulse rose rapidly to 124, and the temperature to nearly 105°. Food and stimulants could be administered only with great difficulty. The pulse, hitherto of good volume and strength, began to fail, the lung congestion became more pronounced, and our patient sank within 24 hours after the rise of temperature to over 100°, on, as near as we could judge, the 22nd day of the fever. Within the last four years we have treated eight cases of typhoid fever in Amoy, all imported in ships coming from Japan. All were well marked cases of the disease. With the exception just recorded none of them proved fatal.

The subject of softening of the brain was attacked in bed during the night by hemiplegia and speechlessness. The speechlessness gradually passed into insensibility, the hemiplegic side became rigid, paralysis extended to the opposite side, respiration became involved, the lungs congested, and in about 5 days from the commencement of the hemiplegia the patient died comatose. For some months he had complained occasionally of abnormal sensations in the head, and transient fits of faintness. On opening the head the pia mater was found very much congested, and over the anterior, outer and under part of the anterior lobe of one hemisphere was an effusion of blood under the arachnoid. This effusion was best marked in and near the Fissure of Sylvius, but nowhere had it the characters of a clot. The basilar artery was plugged over the Pons Varolii by an old and very firm thrombus about half an inch in length. The interior of the Pons was in a state of white softening, quite milky and diffluent, and easily washed away by a very gentle stream of water. The heart and blood vessels were healthy.

List of Cases of Disease occurring among the floating population from 1st October, 1871 to 31st March, 1872.

1.—*Miasmatic Diseases.*

3 cases of febricula.
16 „ „ intermittent fever.
1 „ „ malarious cachexia.
1 „ „ typhoid fever (fatal).

2.—*Enthetic Diseases.*

37 cases of gonorrhœa.
10 „ „ primary venereal sore.
22 „ „ constitutional syphilis.

3.—*Diseases of the Digestive Organs.*

11 cases of diarrhœa.
1 „ „ dysentery.
3 „ „ tonsillitis.
1 „ „ dyspepsia.
1 „ „ gastric catarrh.
1 „ „ melæna.
1 „ „ colic from passage of gall stone.

4.—*Diseases of the Circulatory and Respiratory Organs.*

1 case of phthisis.
1 „ „ bronchitis.

5.—*Diathetic Diseases.*

1 case of acute rheumatism.
1 „ „ subacute rheumatism.

6.—*Diseases of the Generative Organs.*

1 case of stricture of urethra.
1 „ „ paraphymosis.
1 „ „ secondary orchitis.

7.—*Diseases of the Integuments.*

1 case of severe sunburn.
6 „ „ boils.
2 „ „ ulcer of the leg.
1 „ „ urticaria.
1 „ „ chloasma.

8.—*Diseases of the Eye.*

4 cases of conjunctivitis.

9.—*Accidents.*

6 cases of bruise.
4 „ „ sprain.
1 „ „ fractured finger.
1 „ „ „ rib.
1 „ „ gunshot wound.
2 „ „ incised wound.
1 „ „ dog bite.

10.—*Other Diseases.*

1 case of hemiplegia (Japanese).
1 „ „ embolism and softening of brain (fatal).
1 „ „ intercostal neuralgia.
2 „ „ periostitis.
1 „ „ synovitis.
2 „ „ whitlow.
1 „ „ inflammation of external ear.
1 „ „ caries of bones of foot.
1 „ „ sympathetic bubo.

Boucnemia tropica, elephantiasis Arabum, or elephantiasis, is a disease often met with in this part of China. Most frequently it occurs in the legs, but very often we find it attacking the scrotum or scrotum and legs, while sometimes the characteristic swelling appears alternately in the scrotum and legs of the same subject. We have never seen a case in which any other part of the body was affected.

Our ideas of the pathology of the disease accord with those generally accepted, namely that an affection of the lymphatics, excited by malarial influences, produces an inflammation of these vessels, which, by its resulting effusion and consequent constriction obstructs their circulation and the return of lymph and those waste products of tissue which are usually absorbed by them. These unabsorbed matters accumulating in the areolar tissue of the affected parts, produce the characteristic swelling and symptoms of the disease, while the enlarged lymphatic glands and periodical accessions of inflammation in them, accompained with malarial fever, indicate its pathology.

We have never, or very seldom, observed enlargement of the spleen co-existing with this disease, although ague and malarial fever are the usual accompaniments of its development, and its ostensible exciting cause. On this account we are inclined to look upon the affection of the legs or scrotum, as, in some way, vicarious of the enlargement of the spleen, the common and recognised consequence of ague and even of residence in a malarious atmosphere. Occasionally we meet cases in which ague has not been the first symptom of the outbreak of the disease, nor perhaps during its progress has there been any ague, acute inflammation of the lymphatics or rapid and painful swelling of the affected parts. Such cases at first sight

might appear to militate against the hypothesis we have expressed, but they may receive an explanation similar to that applicable to those instances of enlargement of the spleen, neither accompanied nor preceded by ague, but depending on malarious cachexia, the result of life from childhood in a malarious atmosphere, and descent from parents long the subjects of malarious disease. Both diseases have the same origin, and both present the same variations in development and progress.

The disease, as seen in Amoy, agrees with the description found in the standard authorities. We have nothing new to add on this subject, but will confine our remarks to treatment and special points bearing on this.

Elephantiasis of the legs is essentially a chronic disease, in most instances accompanied by periodical acute exacerbations. Accordingly, to relieve or remove it treatment must extend over many months, and should be directed to the prevention of the acute attacks and the removal of their effects. Most good can be done during the subsidence of one of these acute attacks, when treatment should be very energetic. It is seldom that we meet a Chinaman with sufficient faith in our remedies to induce him to submit to a long course of drugging. Seeing the hopelessness of the undertaking, we generally declare our inability to benefit those cases in which the disease has existed for many years, where the unabsorbed and effused matters have solidified into an almost horny hardness, and the skin has grown thick and glabrous. More recent cases, however, we undertake with some hope of at least benefitting, if not of curing. Our plan is if possible to select the few days after the subsidence of fever and inflammation for the commencement of the treatment, to put a blister over the enlarged inguinal glands, rub iodine ointment into the swollen leg, and apply a bandage very evenly and firmly over this, while at the same time quinine and iron with iodide of potassium are given internally, and an improved diet recommended. Perseverance in this plan of treatment is not unfrequently rewarded with great diminution of the swelling, and increase of comfort to the patient. Blistering over the enlarged glands is a most efficacious part of the treatment, and should always be tried.

Ligature of the femoral artery has been performed, and is recommended by some authorities, but the account of the result of this rather serious operation are so contradictory, and the principle on which it is based so utterly at variance with our ideas of the true pathology of the disease, that we have never felt justified in performing or recommending it. Were the disease a true hypertrophy, we could understand how such a proceeding could benefit, but it is not, it is only an hypertrophy as far as bulk is concerned. Nor is it a disease of the blood vessels, and, to our mind, an increased and improved circulation is more to be desired than an arrested or retarded one. Besides entertaining these objections to the principle of the operation in such cases, we very much fear that if frequently performed in constitutions impregnated with malaria, gangrene would be a common consequence, a disease much more serious and inconvenient in its results than elephantiasis of the leg.

Fortunately we are more able to cope successfully with the disease when it attacks the scrotum and skin of the penis. In this case it may attain an enormous development and yet complete relief may be given. Medical treatment, further than as a preparative, is disappointing, and is only a waste of time, for by surgical operation the disease may be thoroughly removed without mutilation of the important parts involved, and with very little risk to the patient. Two operations have been recommended and performed:—

1st.—Ablation of the whole tumour, testicles and penis included.

2nd.—Ablation of the whole of the disease, the testicles and penis being preserved.

1.—Considering the difficulty of dissecting out the penis and testicles, and the danger from hæmorrhage during this tedious process, some have recommended complete amputation of scrotum, penis and testicles, by a single rapid incision, carried directly through the neck of the tumour. The great names of Sir Astley Cooper and Liston are associated with this proceeding, but we regard it as a most dangerous one, sure to be followed by copious, sudden and therefore dangerous hæmorrhage. A sudden escape of twenty ounces of blood is much more to be feared than the gradual loss of double that quantity. Whoever has had the misfortune to slip the spermatic cord and have it drawn up into the abdomen, in excision of the testicle, will hesitate before he encounters the bleeding from two spermatic arteries and a dorsalis penis superadded to the blood supply of a fifty pound tumour. In such an operation, the chance of the spermatic

cords being drawn up into the abdomen is very great; for the testicles, adhering to the tumour, are drawn down by its weight, and the cords being thus put on the stretch, parts normally inside the inguinal canals are presented to the knife, and the hypertrophied cremasters are irritated to contraction. That there is great aptitude for contraction in these elongated cords we have seen in the retraction of half a dozen inches of one during the progress of an operation in which the testicles were preserved. Besides the danger from bleeding, the shock from this operation must be very serious, and much greater than in that which preserves the penis and testicles. The resulting mutilation is also a very serious drawback, and is likely to be followed by contraction of the orifice of the cut urethra. For these reasons, namely the danger from sudden hæmorrhage, the danger from extensive hæmorrhage, the danger from nervous shock, the unnecessary mutilation, and the liability to after contraction of the urethra, this operation should be discarded in every case, no matter how large the tumour may be.

2.—The other operation recommended preserves the testicles and penis, its performance is accompanied by no great risk, and its results are eminently satisfactory. We practice a modification of the usual plan of this operation, and the results are so satisfactory that we are induced to give details of our proceedings, many of which are not adopted generally, or at least are not alluded to in text books, but the observance of which contributes very materially to the immediate success of the operation, and to the subsequent rapid convalescence of the patient.

The principal danger arises undoubtedly from hæmorrhage, and accordingly all our proceedings should be taken with a view of preventing this, as much as is compatible with the proper preservation of important parts. Some idea of the character and amount of the bleeding to be anticipated may be obtained from the nature of the tumour. If this is warm, small and growing, and if the dartos contracts strongly and readily on irritation of the skin, we may expect considerable arterial bleeding; but if on the contrary the tumour is large, cold or ulcerated in parts, and the dartos slow to contract, or contracting but feebly, in other words if the tumour shows signs of degeneration, the bleeding may be almost entirely venous. A consideration of this should affect the nature of our proceedings; first, with regard to the preliminary application of a ligature to the neck of the tumour, and second, with regard to the position of the patient's body during the operation.

Dr. FAYRER of Calcutta recommends the application of a strong cord to the neck of the tumour, the ends of the ligature passing through an iron ring and being drawn tight by two assistants standing well away from the operator and on opposite sides of the patient. CURLING recommends transfixing the neck of the tumour with long needles carrying stout strong ligatures which are then drawn through and tied tightly round the various included segments. Both of these plans, or modifications of them, we have tried and abandoned. The latter is difficult of application, inefficient when applied, and dangerous to the integrity of the spermatic cords, testicles and penis; and the former can have little influence in restraining hæmorrhage even if it does not encourage it, for it is impossible that pressure sufficient to arrest the circulation in the centre of the neck of the tumour, can be thus applied without damaging structures intended to be preserved. If this central circulation is not arrested, a ligature is sure to aggravate instead of to restrain the bleeding during the preliminary dissection, for the bleeding then is principally venous, and would be encouraged by constriction of the veins on the cardiac side of the wound. Again, during the final steps of the operation a ligature like this can never be of the slightest use, for as soon as a cut is made in its neighbourhood, as the last few cuts must be, the cut surface springs back below the cord, and bleeds as vigorously as if no ligature were near it. Thus while it is during these last cuts that bleeding is most dangerous, it is just then that the ligature is of no use. For these reasons we have abandoned it, and trust to other means of avoiding dangerous hæmorrhage. The only case in which we should feel tempted to try Dr. FAYRER's plan would be in amputation of a small, growing tumour in which high temperature and sensibility should lead us to expect much arterial bleeding even during the preliminary dissections, or in cases where the disease should involve the whole of the pendulous mass, rendering it impossible to obtain lateral flaps to cover the testes, and where consequently it would be no great object to avoid bruising the integuments.

Here we may remark that although the proportion of arterial to venous hæmorrhage varies in every case, yet by far the larger proportion of blood lost is from the veins, and a very large and serious

part of this from the cardiac end by regurgitation from the vessels of the trunk. Now this can in great measure be prevented by making the cut surface the highest part of the body, that is by lowering the trunk and legs, and thus counteracting completely the effects of gravitation in promoting the regurgitation. Such a position has also the advantage of to some extent diminishing the risk of syncope, a common consequence of profuse bleeding, and also of the entrance of air into the vessels, a decided possibility in such operations.

For some time before and after operation, the patient should be well fed, and take quinine and iron, every effort being made to relieve the anæmic and cachectic condition he is sure to labour under.

The operation we practice is conducted as follows:—

An operating table or bed, capable of being lowered a foot or more at one end, is placed in a suitable light, the buttocks of the patient resting quite on the edge of the high end. To the centre of this a board of triangular shape with the corners rounded off, is attached at its apex by a strong hook and eye, the hook in the board, the eye in the table. The board should be somewhat longer than the tumour, and for convenience in moving it should have a handle at the broad end. The object of this arrangement is to give support to the tumour during the operation, to allow it to be easily moved in any direction to suit the convenience of the operator, and to prevent dragging down of the deeper structures of the perineum, matters of the utmost importance in facilitating the rapid performance of the last, most bloody and dangerous steps of the operation. When the tumour is of so small a size as to be easily supported and moved about in the grasp of the hand, the supporting board may be dispensed with.

To empty it of blood as much as possible, the scrotum, for an hour or two before commencing, should be firmly bandaged to the supporting board, and elevated above the level of the rest of the body by a rope attached to the handle. Another table is placed for the legs to rest on until the time of operation arrives.

During some days previous, while the patient is undergoing the necessary preparatory treatment, the surgeon should endeavour to ascertain exactly the position of the testicles. A good plan is to set the patient to hunt for them himself. Also the possibility of hernia should not be overlooked.

The patient having been brought under the influence of chloroform, the table supporting his legs is to be taken away, the legs widely separated, lowered and committed to assistants, the bandages removed, and the tumour placed in a convenient position. If the supporting board is required it should be entrusted to a seasoned assistant who will keep well out of the way and be indifferent to a flow of blood.

For clearness of description we will divide the operation into six stages:—

1. The dissection for the testicles.
2. The dissection for the penis.
3. The formation of two lateral flaps.
4. The fixing of the tumour to the supporting board, the dissection up of the spermatic cords, and the uniting of the upper extremities of the incisions for testicles and penis by a transverse incision.
5. The ablation of the tumour.
6. Ligature of vessels, stitching and dressing wound.

1. *The dissection for the testicles.*

If the position of the testicles has been ascertained with precision, an incision not more than four inches long should be made near one of them in a direction parallel to the assumed course of the cord; but should the exact position of the testicles not be known, the cut should be made about two inches from the orifice of the urethra, the centre of it being opposite the orifice. This incision is then to be extended through the hard outer rind of the mass, until the soft semi-gelatinous areolar tissue of the centre is reached, usually about an inch or an inch and a half from the surface. Should any artery or large vein bleed, which is by no means always the case, it must be tied at once. The incision should be big enough to admit the hand, but no bigger. The knife is now laid aside, the hand is thrust into the wound, and by a process of tearing the testicle is searched for. This must be done, not in a haphazard, but in a systematic manner, first backwards,

then on either side and, failing that, upwards. If done in a random way the search may be long and tedious. Any band or firmer tissue which cannot be torn, and which resists the onward progress of the hand, should be nicked with a scissors or knife and then torn, but great care should be taken to avoid the cutting of veins or arteries deep in the wound. As a rule, the search thus conducted is not a long one, either the testicle itself being quickly found or the cord leading to it which may be followed up. The testicle is usually enclosed in an undefined bag firmer than the tissues surrounding it and than that on its inner surface. A process from this bag is found extending downwards towards the bottom of the tumour. A vulsellum should now be applied to this process, clear of the gland, and the bag dragged up. A nick is made with the knife in this, and through the opening a finger is introduced and the sack torn open, when the tunica vaginalis and testicle are easily enucleated as far as the origin of the cord, a few touches of the knife being perhaps required to liberate the epididymis. This accomplished, the testicle is again replaced, and the wound firmly stuffed with cotton. The opposite side is then treated in the same way. It is important to observe that during this dissection the knife should be used as little as possible, and the external wound made as small as possible. The greater part of the dissection should be made by tearing. The wound must be well stuffed with cotton after the testicle is replaced. With these precautions, seldom more than four or five ounces of blood are lost, and sometimes the hæmorrhage from both wounds may not exceed two or three ounces.

2. *The dissection for the penis.*

The finger or a director is next inserted into the orifice of the prepuce, a sharp pointed bistoury is pushed in and the superjacent tissues are divided directly upwards in the middle line until the glans penis is discovered. This incision is then extended as high up as the morbid integuments reach. The glans, which is very slippery and difficult to keep between the fingers, is then drawn aside by the clean fingers of an assistant or by a clove-hitch passed round the sulcus, while the mucous membrane of the prepuce is seized with a forceps and cut all round quite down to the body of the penis. Unless the whole of the mucous membrane is removed, the remains are apt to become œdematous and swollen on cicatrisation of the penis, and present an unsightly appearance. When this has been removed and the frænum divided, the penis can be dissected up (care being taken to avoid the dorsal artery and urethra) to the extent required. Any vessel spouting should be tied, but if unnecessary cutting away from the middle line has been avoided no large veins or arteries are likely to be opened.

3. *The formation of two lateral flaps.*

For the proper understanding of this step it is necessary to premise that the neck of the tumour is not round or oval as one might at first suppose, but that at its narrowest section it is rather square-shaped. The surfaces opposed to the thighs are covered with soft, healthy skin, borrowed by the dragging and growth of the tumour, and extending as far as the anterior surface in front and the posterior behind, and downwards for four or five inches. A reference to the rough diagram [2] will give a better idea of this. The whole of this healthy integument should be included in the lateral flap by a semilunar incision sweeping round just clear of the disease from the anterior to the posterior angle, the concavity looking upwards. This incision made, the flap is to be dissected well up and any considerable vessel tied. A corresponding flap is to be then made on the other side, and the posterior cornua of both united by a shallow transverse incision.

4.—*The fixing of the tumour to the supporting board, the dissection up of the spermatic cords, and the uniting of the upper ends of the incisions for testicles and penis.*

Unless the tumour is a very large one, the formation of the lateral flaps is perhaps more easily and rapidly accomplished while the tumour only rests on the supporting board, and can be rolled from side to side. But when these have been completed it becomes necessary to fix the unwieldy mass firmly, so as to allow of its being rapidly and easily moved from side to side, up or down, as the exigencies of the operation demand. It is now, especially, that the advantage of the supporting board become manifest, for the last stages of the operation must be rapidly performed, and the incisions made with precision, to avoid wounding

the penis, the cords or the deep structures of the perineum. With a mass weighing forty or fifty pounds, moved about in an uncertain and unmethodical way by two or more excited assistants, this is very difficult to do, and some device such as the supporting board we recommend, is a great advantage.

A strong cord, both extremities of which carry a long needle, having been provided, the cotton in the testicle-incisions is removed and through the bottom of the inferior extremities of these the needles are thrust, and brought out through holes made for the purpose in the supporting board; the ends of the cord are then drawn through, brought round the edge of the board, tied over the tumour, and for additional security drawn tight and firmly wound round the handle. When this has been effectually accomplished, the tumour can easily be moved in any direction by the handle held by the surgeon or an assistant, and the operation proceeds. The incisions for the testicles are now to be rapidly extended upwards as high as that for the penis, with which they are to be united by a transverse cut after the cords have been dissected up.

5.—*Ablation of the mass.*

Finally the testicles and penis being well drawn up by one assistant, the lateral flaps well drawn out by those holding the legs, the surgeon or an assistant moving the supporting board so as to accommodate the parts to the movements of the knife, the anterior extremities of the flap incisions are united with those for the cords and testicles, and the whole mass rapidly removed by a few strokes of the knife. The supporting board is then unhooked, and with the scrotum attached put aside.

6.—*Ligature of the vessels, stitching and dressing of the wound.*

The exposed surface is at once covered with a sponge firmly pressed against it. The larger arteries are taken up and tied first, then the veins, the ligatures being brought out at the lower part of the wound. The testicles are allowed to fall down, and the flaps are sewn over them with thick catgut sutures inserted well back in the flaps and not tied too tightly. The upper third of the flaps should be sewn to the margin of the transvere incisions. The resulting lines should then be ⊤ shaped, the testicles completely covered, and the raw penis protruding from the junction of the horizontal with the perpendicular line. Carbolic oil and lint are placed over the penis and lines of incision, cotton is stuffed between the thighs and the new scrotum so as to secure the apposition of the raw surfaces, and the legs are brought together and kept so by means of a few turns of a bandage round the knees.

A warm bed should be ready for the reception of the patient, and warm bottles placed round him. Stimulants, if necessary, may be freely administered until reaction sets in, and when this has occurred the patient may be said to be almost out of danger, so little is the risk from the after consequences of this apparently most dangerous operation. The transverse incision heals usually by the first intention, as also may some of the longitudinal, but generally most of the latter unite by granulation.

We have never had any secondary hæmorrhage or serious after-complication. Sometimes part of a flap may slough, but as a rule convalescence proceeds uninterruptedly, and most cases are out of bed in less than a fortnight, and quite healed in a month. Should cicatrisation of the penis proceed slowly it is much assisted by winding a strip of sticking plaster round it, while any gaping of the flaps must be counteracted by suitable support.

Complications during operation may arise from the presence of a hernia, or a hydrocele, or from difficulty in finding an atrophied testicle. These are all met in the first step of the operation, and as there is no particular hurry at this stage, can be dealt with deliberately. A hernia must be carefully dissected out, a hydrocele punctured and redundant tunica vaginalis excised, an atrophied, cystic or otherwise diseased testicle cut off, and the spermatic artery carefully ligatured. Should the patient threaten to sink from loss of blood we would not hesitate to transfuse, were suitable instruments handy, and a supply of blood obtainable.

For some time after its separation from the living body, the dartos of the tumour retains its irritability and contractile power. This may be elicited by drawing the finger nail firmly over the skin, when, after a few seconds, a slight but distinct movement is seen gradually to extend from the point of irritation,

altering the shape of the tumour in a remarkable manner. We have observed this phenomenon at least an hour after the operation was completed.

We subjoin short notes of ten consecutive cases in which the operation we have described was performed with gratifying result in all, and, with the exception of one instance, apparently at little risk to the patients. The lines of incision were the same in all, but some of the details we have described were not adopted in the earlier cases, but have grown out of the experience gained in them.*

Illustrative Cases.

1.—Ju-sia; aged 19; field labourer, from Tchhoan-tchhin; suffered from elephantiasis of the scrotum for five years. At first the swelling was entirely confined to the right testicle, which recovered its normal size after being affected for five months, but at the same time the skin near the left testicle was attacked, and after another month the whole scrotum swelled, and has since gradually enlarged to its present dimensions. At the commencement of the disease he had an attack of ague, and during the greater part of its existence he has been more or less liable to these attacks, the scrotum swelling with the accession of the ague and diminishing to a smaller extent during its recession.

A mass weighing 7½ lbs. was removed by operation, with testicles and penis preserved. Recovery was perfect, and he was able to resume work while under our observation.

2.—Khi-tan. The scrotum removed from this man weighed 11½ lbs.; testicles and penis preserved. In consequence of slight constriction during cicatrisation of the penis, a part of the prepuce which had been overlooked during the hurry of the operation, swelled and became œdematous. With this trifling drawback the recovery was perfect, and the patient is now able to do his work with comfort, a thing he had until then been unable to do for many years.

3.—Tin-rhoah; aged 42; a field labourer, from Namoa. Has had ague every year since he was a boy. At 14 had the chicken pox, and about the same time a large vesicle the size of a cup appeared on the scrotum, but did not burst for a year when it discharged and healed perfectly. At 23 the glands in the right groin became swollen and painful, and in a short time the leg assumed the usual appearance of elephantiasis. The distress from this was much aggravated by inflammation of the lymphatics when he had ague. When the leg was easier the testicles swelled and pained. After a time the scrotum also became involved, and as the swelling in this increased the leg gradually diminished until it resumed its normal dimensions. At 29 a lump like a stone formed in the scrotum; a Chinese doctor opened this giving vent to about three pounds of offensive pus. A yellow fluid continued exuding from the wound thus made until he was 40 years of age, when the discharge ceased. Up to this time the growth of the tumour was very gradual, notwithstanding a severe attack of ague and inflammation of the lymphatics at 34. Now, however, the swelling increased rapidly.

After a week's preparatory treatment he was operated on, and 7¼ lbs. of scrotum removed. The tumour hung very low and had a narrow neck. One testicle and the penis were preserved. The left testicle was atrophied, and was consequently excised and the cord ligatured. Recovery was perfect.

* *Explanation of Diagrams.*

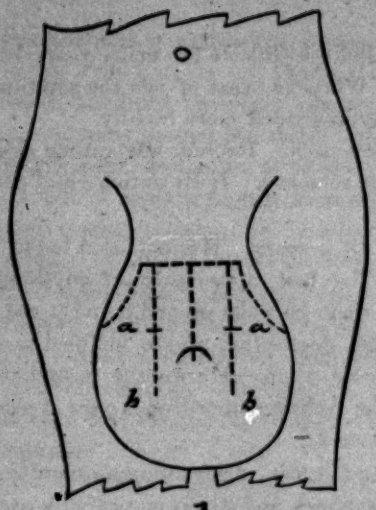
1.—Shows the lines of incision. Those for the testicles should only extend from *a* to *b* in the first stage, and be afterwards extended upwards in the dissection out of the cord.

2.—Represents a section of the neck of the tumour at its narrowest part; diseased skin in front and behind, but healthy integument on either side, from which the flaps should be taken.

3.—Transverse section of the tumour at the level of the testicles, showing the outer rind of dense thickened skin which must be cut through, covering the loose areolar tissue which must be torn through, the latter enclosing the testicles and tunica vaginalis in a loose bag of firmer tissue which must be nicked and torn.

4.—Represents the outline of the wound after the tumour has been removed, and the points at which the sutures should be introduced. First *a* must be joined to *a*, and *b c d* in the flap joined to *b c d* in the transverse incision, and *e f g h i j k* to corresponding points in the flaps.

5.—The lines resulting from closure of the wound; the penis hides the upper part of the perpendicular seam.



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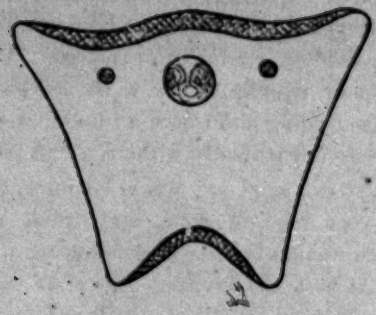

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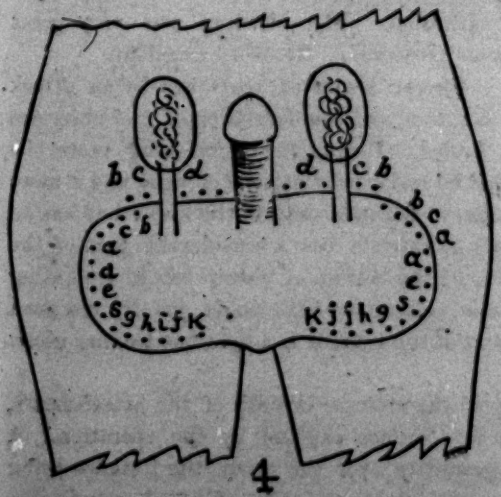

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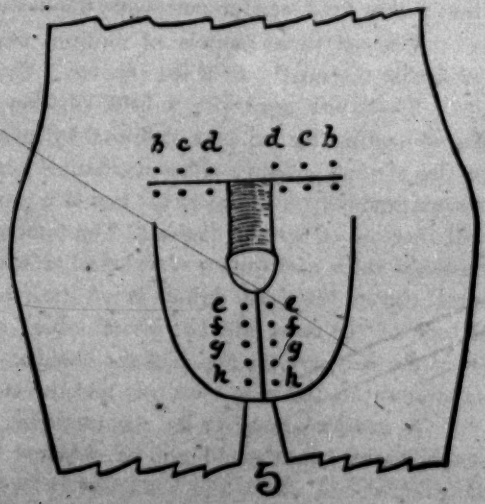

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4.—Sim-ham; aged 43; a field labourer, from Tsau-an. Had a hydrocele for many years before the appearance of elephantiasis. Has not been troubled with ague. When 32 years of age the scrotum began, without pain or redness, gradually to enlarge. At 39 the swelling progressed more rapidly.

The tumour reaches nearly to the ankles and has a narrow neck. Patient was rather debilitated, but after 10 days feeding and tonics a tumour weighing 32 lbs. was removed. Both testicles and penis were preserved. Recovered perfectly without a bad symptom.

5.—Sim-ngan; aged 42; a field labourer, from Thien-po. Ill 9 years. Has not been liable to ague. Says he was very fond of wine, and drank rather freely. The first appearance of anything wrong with his scrotum was on the morning following a heavy debauch, when he woke up and found it red, swollen and painful. At first the swelling somewhat subsided. From his description we are inclined to consider this primary swelling the result of a hydrocele, probably of traumatic origin. During the second year of its existence a Chinese doctor burst it and for a time the swelling was trifling, but within a year it attained its former dimensions, and then the skin of the scrotum became thickened.

During the operation a large hydrocele was opened on the left side, discharging a quantity of dirty straw coloured fluid; the corresponding testicle was found to be atrophied, and it was accordingly excised and the cord ligatured. Penis and a healthy right testicle preserved. The tumour weighed 9½ lbs. Patient made a good recovery.

6.—Sio-phan; aged 38; a field labourer, from Namoa, Bio-lai-sia. Ill 10 years. Previous to this was very healthy, but then contracted an ague which recurs every year. On every recurrence of the ague the scrotum becomes red, painful and swollen, the swelling after a time subsiding a little but the tumour adds to its size with every fresh attack.

After 8 days preparation he was operated on, and a mass weighing 24 lbs. was removed. Penis and both testicles preserved. Patient made an excellent recovery.

7.—Sim-tsui-kae; aged 49; a field labourer, native of Tchhau-an. Since he was a little over 30 years of age has been constantly more or less liable to ague, the attacks of which always leave him very anæmic and weak. Elephantiasis began first in the right leg, the glands in the inguinal region swelling to the size of a fowl's egg. This leg gradually increased in size during 4 or 5 years, when the other leg was attacked by the same disease, after which the right leg diminished slightly in size. In 3 years more, during an attack of ague, pain, redness and swelling appeared in the scrotum; these have been renewed frequently during 8 years. Sometimes the swelling is very great, at other times, as at present, it is comparatively trifling. He frequently allays the urgency of the symptoms by pricking the legs and scrotum, allowing the escape of a thin yellow fluid, and proportionate diminution of the tumour.

Two or three pounds of scrotum were removed by operation. The bleeding was very great considering the small size of the tumour. Both testicles and penis preserved. Recovery excellent.

8.—Sang; aged 38; a field labourer, from Thien-po. Disease began 12 years ago by an attack of ague lasting for 20 days, followed by inflammation of the scrotum and the formation of two abscesses the size of duck's eggs; these discharged and after 10 days healed. During the 4 following years the scrotum gradually enlarged to the size of a pumelo, and after this he had yearly attacks of ague and a more rapid increase of scrotal disease. The tumour is now very large, it descends only to the knees but has an unusually thick neck and a very broad attachment. Posteriorly it extends over a considerable part of the gluteal region, the anus (which is not itself involved) appearing at the bottom of a deep fissure separating the back of the mass into two lateral lobes; anteriorly it extends well up over the pubis, involving a good part of the skin over the region of the bladder. Low down in front of the tumour is a fistulous looking ulcer, and around this the mass feels cold and threatens gangrene.

A mass weighing 51 lbs. was removed. In consequence of the extreme breadth of the attachments, enough healthy skin could not be obtained to cover all the raw surface exposed by the operation. A triangular wound, about 6 inches broad at its base, was left to granulate over the pubis, the testicles being completely covered by lateral flaps. During the operation a considerable quantity of blood, principally

venous, was lost, but no very large artery was opened. Both testicles were quite healthy, the right situated high up in the neck, and the left nearer the base of the tumour.

Just as the mass was being removed the patient, who for some time had been under the influence of chloroform, suddenly ceased to breathe, and his radial artery could not be felt. The faint did not last long. He vomited a great deal after the operation, but rapidly became stronger, took his food heartily, and in 12 days was out of bed, the enormous wounds steadily contracting and healing.

9.—Too-lae; aged 42; a field labourer, from Toaia. Has been very poor and miserably fed on potatoes and vegetables. Troubled often with bad rheumatism in the seat of an old bruise on his right flank. Had ague several times before the appearance of the elephantiasis. This began 6 years ago in the skin of the penis, spreading gradually to the scrotum. Three years ago had an attack of ague accompanied by inflammation of the scrotum, which until then was of no great size. At the same time the left inguinal glands and corresponding leg swelled. After this the tumour increased very rapidly; ague came with every occurrence of bad weather, and he became debilitated. With every attack of ague there was a rapid increase of the scrotal swelling.

After a course of tonics and beef, a tumour weighing 21 lbs. was removed. Both testicles and penis preserved. Recovery perfect.

10.—Ong-an; aged 35; a field labourer, from Tchhoan tchhin. Ill 5 years. Married at 29 and enjoyed good health until 31 years of age when he had an attack of ague, and coincidently with this, a swelling the size of a marble appeared a short distance below the umbilicus. This after a time subsided, but a swelling of the inguinal glands took its place. Every year he has ague, and during 5 years the scrotum has gradually enlarged to its present size.

A 10 lbs. tumour removed. Testicles and penis preserved. Considerable arterial bleeding during the last steps of the operation. Recovery perfect.

F.—Dr. David MANSON's Report on the Health of Takow and Taiwan-foo for the half year ended 31st March, 1872.

WITH a lower temperature and a smaller rain-fall it is to be expected that in South Formosa, where the only diseases affecting foreigners are of the malarial type, the health of the community for the winter six months should compare favourably with that for the summer six months, and so it turns out, for, with the exception of two mild cases of ague, there were in the period under review no instances of climatic diseases to be noted. The average number of residents was 35.

The health of the crews of ships frequenting the port of Takow was also excellent. There was no instance of climatic disease acquired in port. One death from drowning occurred.

Throughout the past year the only diseases observed were a few cases of ague and two cases of remittent fever. Would the residents, or those for whom they act, take advantage of the high land in the immediate neighbourhood of Takow, and build their dwelling-houses on it instead of on the low lying ground, it is probable that the number of such cases would be even fewer.

In the recent proposal for the withdrawal of the British Consulate from Formosa one of the reasons assigned for doing so was "that the climate was most trying and unhealthy, and that it destroys the energies "and health of those sent to reside there more than any other port in China." It is impossible to conceive on what grounds such a statement was based. The statistics of the past year and the experience of former residents contradict it. The insular position of Formosa giving rise to a low temperature, and one not subject to great variations, and the ports being situated close to the sea, combine to render the climate one of the best in China. The highest summer temperature during the past year was 89° Fahr., and the lowest winter temparature was 50° Fahr., giving a range of 39 degrees. The nocturnal and diurnal range is very small. This ought to be a climate well suited to those labouring under disease of the lungs, and it has been observed in several cases that natives suffering from phthisis and coming from the mainland of China have undergone a marked improvement after some months residence in South Formosa. The remarkably chronic nature of phthisis as seen among the patients frequenting the Chinese Hospital at Takow also points to very favourable climatic influences.

TABLE of Maximum, Minimum and Mean Temperatures in the shade for each Month, and the number of Days on which Rain fell.

MONTH.	HIGHEST.	LOWEST.	MEAN HIGHEST.	MEAN LOWEST.	DAYS OF RAIN.
October,	88°	77°	83°	80°	3
November,	83°	64°	76°	71°	17
December,	79°	50°	70°	64°	—
January,	78°	61°	71°	64°	3
February,	74°	57°	68°	62°	2
March,	80°	55°	74°	69°	2

The Rain-fall has been almost nil, these figures only representing very slight showers.

The following is a list of the diseases of *Natives* treated during the past six months:—

A.—Zymotic Diseases.

I. *Miasmatic Diseases:*—

Intermittent Fever—	
Quotidian,	71 cases.
Tertian,	40 „
Quartan,	46 „
Remittent Fever,	14 „
Dysentery,	7 „
Diarrhœa,	5 „
Ophthalmia,	11 „
Erysipelas,	1 „

II. *Enthetic Diseases:*—

Gonorrhœa,	12 „
Syphilitic Iritis,	1 „
Stricture,	2 „
Orchitis,	2 „
Syphilitic Rheumatism,	5 „
Syphilis:—	
Primary,	5 „
Secondary,	5 „
Tertiary,	21 „
Syphilitic Ulcers,	9 „

III. *Dietic Diseases:*—

Bronchocele,	3 „

IV. *Parasitic Diseases:*—

Lumbrici,	11 „
Scabies,	7 „

B.—Constitutional Diseases.

I. *Diathetic Diseases:*—

Rheumatism,	47 „
Anæmia,	15 „
Asthma,	6 „

II. *Tubercular Diseases:*—

Phthisis Pulmonalis,	9 „
Scrofula,	3 „

C.—Local Diseases.

I. *Diseases of Nervous System:*—

Hysteria,	1 „
Epilepsy,	1 „
Neuralgia,	5 „
Sciatica,	1 „

II. *Diseases of Circulatory System:*—

Valvular Disease of Heart,	2 „

III. *Diseases of Respiratory System:*—

Chronic Bronchitis,	21 „
Emphysema,	3 „

IV. *Diseases of Digestive System:*—

Enlarged Spleen,	51 „
Dyspepsia,	31 „

C.—Local Diseases.—*Continued.*

IV. *Diseases of Digestive System.*—*Continued.*

Toothache,	9 cases.
Piles,	6 „
Inguinal Hernia,	2 „
Icterus,	2 „
Fistula in Ano,	5 „
Stricture of Œsophagus,	1 „

V. *Diseases of Urinary System:*—

Stone in the Bladder,	1 „
Bright's Disease,	4 „
Cystitis,	3 „
Prostatitis,	1 „

VI. *Diseases of Generative System:*—

Spermatorrhœa,	3 „

VII. *Diseases of Locomotive System:*—

Arthritis,	2 „
Caries,	2 „
Necrosis,	7 „

VIII. *Diseases of Integumentary System:*—

Ulcer,	46 „
Psoriasis,	5 „
Impetigo,	2 „
Eczema,	2 „
Lepra,	4 „
Abscess,	23 „
Whitlow,	7 „
Keloid,	3 „
Ichthyosis,	1 „
Elephantiasis,	2 „

IX. *Diseases of the Eye:*—

Amaurosis,	3 „
Cataract,	5 „
Corneitis,	7 „
Cornea, Conical,	7 „
Opacity of,	15 „
Ulcer of,	26 „
Chronic Conjunctivitis,	53 „
Entropium,	13 „
Trichiasis,	12 „
Destruction of Eye,	3 „
Pterygium,	7 „
Glaucoma,	2 „
Staphyloma,	3 „

D.—Developmental Diseases.

II. *Of Women:*—

Amenorrhœa,	5 „

E.—Lesions from Violence.

I. *Accident*,	32 „

Throughout the past year the principal causes of death among natives were malarial fevers. These were most prevalent during the months of August, September, October and November, and least during the months of February and March. Most of these cases come from the flat country in the neighbourhood of Takow, a district where one would expect malaria to prevail, but a considerable number of patients suffering from intermittent and remittent fevers and splenic enlargement also come from Lambay, a small rocky island lying about 10 miles south from Takow and separated from the mainland of Formosa by about 6 miles of sea. Judging from its physical characters, Lambay Island ought to be the reverse of what is usually considered "malarious," but from what I have seen and heard malarious fevers are exceedingly prevalent there.

Among the "accidents" was the case of a man whose hand had been crushed in a sugar mill three weeks before admission to Hospital. The hand was in a most filthy condition. The jaws were firmly clenched. Amputation was performed in the middle of the forearm. Opisthotonos and spasm of the intercostal muscles coming on, the patient died 14 days after operation. Hydrate of chloral was given in large doses, producing sleep and preventing spasm and the starting of the muscles of the stump which was apt to bring on spasm of the muscles of the back and chest.

G.—Dr. W. W. Myers's Report on the Sanitary Condition of Chefoo.

The port of Chefoo (Yentai) is situated in Lat. 37° 35′ 56″ N. and Long. 121° 22′ 35″ E., lying on the same parallel with Athens, Smyrna and San Francisco, and to a great extent uniting the health bearing and restoring properties of these places, while it seems peculiarly free from any of the drawbacks existent in the climates of the similarly placed cities referred to.

On entering the harbour of Chefoo a panorama of picturesque hills is the first and most prominent feature. On closer inspection the hills are seen to take the form of an amphitheatre, commencing on the east at Knob Point and gracefully circling round towards the south, dipping on the west towards the sea, and connected by a sandy spit four or five miles in length with that bold and beautiful cluster of hills well known to mariners, and gratefully hailed by sea-sick tourists, as the "Chefoo Bluff." The formation of Chefoo bay is thus due to the bluff on the north and the sandy spit on the west, together with the shore on which the town is placed on the south.

Jutting into the bay, and separating the harbour from the bight so well known to bathers, is a conical hill surmounted by a signal station, and having on its sheltered slopes several pretty bungalows, while under its shadow nestle the various residences making up the foreign settlement of Yentai. This, backed by the gorgeously cultivated plateau extending to the base of the hills, forms a vista at once pleasing to the eye and suggestive of health to the spectator.

The climate of Chefoo, while decidedly mild and equable, stands in marked contrast to that possessed by most of the other ports in China by reason of that moderate dryness which is so essential a constituent of a bracing atmosphere. That this desideratum attains the happy medium most useful, a glance at the meteorological tables will show. Again, ozone, that all important factor in the production of a healthy climate, appears to exist in a proportion which brings the atmosphere of Chefoo as nearly as can be attained to the standard of perfection. Though in sufficient quantity to be preservative of health, it is not in that excess which at other places of sanitary resort has been found to injuriously stimulate persons of weakly constitution.

The local meteorological records must necessarily prove a very interesting portion of a Report on a place, the chief attractions of which lie in the fact of its being the refuge for persons flying from the deleterious or disagreeable effects of excessive heat. The temperature of Chefoo is by no means excessive in summer, not surpassing in height that which may be encountered at the most favoured watering places of Europe. Last summer (a season totally unprecedented in the memory of the oldest resident) would appear to contradict this assertion; but if reference be made to the thermometrical records of past years, or even if consideration be given to the frequent refreshing intervals of greatly diminished temperature varying the unwonted warmth experienced last year, one may safely hold that, taken at its usual, Chefoo offers opportunities for escape from tropical disadvantages which residents south of Shantung Promontory do not possess. Indeed I fancy it is no exaggeration to say that but few places equal and none surpass Chefoo in the privilege of possessing a temperature so happily adjusted by surrounding local influences.

The winter is severe but, as I shall hereafter show, this does not appear to affect the healthy or to injure the delicate to an appreciable extent.

ABSTRACT of Observations of the Thermometer, Barometer and Rain Guage, taken at a height of about 130 feet above the sea level.

MONTHS.	THERMOMETER (FAHR.)				BAROMETER.	RAIN GUAGE.
	MEAN MAX.	MEAN MIN.	WET BULB.	DRY BULB.	MEAN.	INCHES.
1871.						
April,	58.9°	45.5°	49.1°	54.3°	29.85	1.45
May,	71.6°	54.5°	57.4°	64.8°	29.76	0.30
June,	75.6°	68.0°	—	—	—	—
July, 9 A.M.,	80.8°	73.3°	76.8°	79.1°	29.68	9.98
July, 10 P.M.,	85.6°	75.8°	75.4°	76.7°	29.68	
August,	79.1°	70.8°	69.7°	75.1°	29.68	2.27
September,	73.5°	61.2°	62.2°	67.6°	30.03	3.30
October,	67.8°	54.1°	54.2°	61.8°	30.07	0.24
November,	50.2°	38.0°	40.6°	44.5°	30.11	0.90
December,	34.3°	24.4°	31.0°	31.0°	30.22	snow.
1872.						
January,	28.8°	19.9°	24.5°	24.7°	30.23	snow.
February,	34.0°	24.1°	28.5°	29.0°	30.28	snow.
March,	43.7°	34.6°	36.9°	40.9°	30.01	—

Observations taken daily at 9 A.M., and in July at 10 P.M. also.

On two days (one in June and the other in July) the thermometer stood once during the day at 101° Fahr.

The general health of Chefoo has during the past year been most favourable, both with reference to the constant residents and to the visitors coming here in pursuit of either business or pleasure. I subjoin a table of deaths which occurred during the past twelve months on shore. I have omitted those which happened afloat, as in every instance decease terminated illnesses contracted elsewhere, and succeeded arrival at too short an interval to admit of Chefoo bearing the responsibility. I may mention, however, that the actual number of persons who, entering our waters moribund, were interred here was 5, of whom 3 were seamen belonging to ships of war, and of these 2 died of constitutional diseases.

TABLE of Deaths among foreigners at Chefoo for the year April to March, 1871–72.

SEX.	DISEASE.	CASES.	REMARKS.
Male,	Delirium Ebriositatis,	1	Chronic Dypsomaniac.
"	Enthetic Disease,	1	Adult.
"	Erysipelas,	1	"
"	Tuberculosis (abdominal),	2	Infants.
"	Cardiac Disease,	1	Adult.
"	Spina bifida,	1	Infant (2 days old.)
	Total,	7	4 Adults and 3 Infants.

An analysis of the table will show that with one exception climate had no influence either direct or indirect in causing death. The case of cardiac disease occurred in a man from a ship just arrived at the port, whose death took place almost immediately on landing, and a few minutes after I had been called to see him. The only case the fatal issue of which may be ascribed to local causes is the one of erysipelas, and as some interest is attached to it I append a brief sketch.

The patient, a strong well built man, formerly in the army, had always borne an excellent character for steadiness and regularity of habits. He had suffered for two or three days from a severe cold, which however until the day preceding his death had not prevented him from doing his ordinary duty. By the constant use of his pocket handkerchief he had set up some little irritation about the tip of his nose which, 24 hours before I saw him, became painful, the inflammation exhibiting a tendency to spread while

slight fever began to manifest itself. He went to bed, but did not seek medical aid, and on the occasion of my first visit I found him deeply comatose, and exhibiting all the worst symptoms of facial erysipelas extending to the brain. He died in about four hours after I saw him first, and 24 hours after noticing the irritation at the tip of his nose and feeling feverish. I have only to add that the patient had for many years been a total abstainer.

Diseases prevalent at Chefoo.—If this heading were meant to comprehend diseases affecting only the regular residents at the port or attacking persons during their stay here I should have but comparatively trivial ailments to mention; but so many persons visit Chefoo in avowed pursuit of relief from diseases contracted at other places that on reference to my nosological table I find that typical cases of most complaints present themselves for treatment. While, therefore, recording the absence of any epidemic, I may state that but few diseases specially prevail here, or seem to meet with other than an adverse reception on their introduction from without. The general type of disease, as also the peculiarities and complications encountered, will therefore, beyond noticing the modifications effected by climate, not demand further remark.

As to treatment I will first allude to the specific influence of ipecacuanha on acute dysentery. My mode of administration is very similar to that advocated by Dr. SOMERVILLE of Foochow, and is as follows:—On first seeing the patient he is ordered to take a pill containing one grain of opium. Twenty-five minutes after this, a mustard plaster is applied over the pit of the stomach, and as soon as this begins to take effect I give 40 grains of ipecacuanha mixed in a wineglassful of water. He is urged to endeavour to retain the powder at least an hour; and it is wonderful how often even the weakest patients are able to do this. Should the nausea however threaten to become unbearable after half an hour, I have found a draught containing two grains of carbolic acid most efficacious in enabling the stomach to retain its contents during the prescribed time. Of the immediate influence of ipecacuanha on dysentery I cannot speak in too high terms. The physician as well as the patient is often tempted to regard its action as "perfectly miraculous." Nor does its effect seem limited to that form of ulceration met with in dysentery properly so called. I have to record its repeated efficacy in cases of hæmorrhage from the bowels due to tubercular ulceration, one of the most serious and distressing symptoms in phthisis. In tubercular diarrhœa I have often found its use most satisfactory. I am convinced that all ulcerative action of the intestinal glands, from whatever cause, is beneficially acted on by this drug, and it is a fact of the highest practical importance that heroic doses given as I have indicated set up less nausea than smaller doses given repeatedly. I should state that in those rare cases where it may seem advisable to give another dose, that is where little or no change has been effected in the evacuations, I am in the habit of giving only 20 grains with the same precautionary measures; and if a third dose should be indicated I have found 10 grains suffice. While on therapeutics I am anxious to corroborate the statements made regarding the antidotal effect of atropine in opium poisoning. The antagonism between opium and belladonna was pointed out by PROSPER ALPIN just 300 years ago, but it is only since 1843 that any large number of instances have been brought forward in proof of the virtues of atropine as an antidote to opium.* In confirmation of the results obtained, as I have been told, at the Chinese Hospital in Shanghai, I have found injections containing from $\frac{1}{3}$ to $\frac{1}{2}$ a grain of the alkaloid the most satisfactory.

I would here mention the well marked effect which the inhalation (not by spray, which appears injuriously stimulative) of carbolic acid has in even advanced cases of phthisis in apparently arresting the further deposit of tubercle, besides alleviating the distressing symptoms.

Climate in relation to Disease.—The winter of Chefoo, though severe, is considerably modified as to its effects by the equable temperature preserved during the day and night, as also by the absence of any very

* Among the most recent moderns Dr. WILSON of Philadelphia (*Medical and Surgical Reporter* for November 1868, and *Lancet*, 3rd April 1869) should have the credit of introducing and bringing prominently before the profession the practice of hypodermically injecting atropine in cases of opium poisoning. In his case a solution of $\frac{1}{4}$ grain of the alkaloid was injected successfully when the patient was obviously at the point of death. R. A. J.

sudden changes. This coupled with the exceeding dryness of the air renders it less liable to propagate or intensify disease than the climates of places possessing a similar severity of cold. The importance of this characteristic will be appreciated when I mention our comparative freedom from serious affections of the respiratory organs during the winter months.

Of the early spring, however, I cannot speak so favourably, this period being usually marked by the prevalence of an epidemic of feverish catarrh closely allied to influenza. At this time, too, we meet with those bowel affections which prove more annoying than dangerous. From the beginning of May to the end of November we enjoy a climate which to my mind stands unrivalled. Its tonic and bracing effects are speedily shown on those suffering from debility consequent on recent attacks of acute disease. We see dysentery and diarrhœa rapidly giving way to the health restoring properties of the climate. To invalids suffering from hepatic or renal affections, to dyspeptics with loss of tone; in a word to all those suffering from the effects of exhaustive disease the climate of Chefoo offers unequalled advantages. As a resort also for persons usually resident in tropical or analogous climates I cannot speak too highly of this port. The mild and genial nature of the atmosphere, kept temperate even under the exceptional heat of last summer by the sea breezes, and its chemical and health productive purity are equally palpable to the exhausted invalid and to the scientific visitor.

Disease in relation to local conditions.—Under this head I have only to record the absence of drainage; but at the same time I must confess that this appears to exercise no injurious influence over the sanitary state. I account in three ways for the absence of those deleterious effects which might justly be supposed likely to follow so dangerous a disregard of sanitary laws—first, by reason of the great porosity of the soil; secondly, by the prevalence of high winds acting as diluents; and thirdly, by the characteristic assiduity with which the natives collect all refuse matter for agricultural purposes.

There being no damp or swampy soil within a great distance of Chefoo ague is not met with among the natives of the district.

Peculiar Diseases.—My previous remarks necessarily have reference to the foreign residents only, as I have no opportunity, nor indeed is it my province, to practise among the natives. That this Report, however, should contain as much information as possible I appealed to my friend Dr. Brown of the Baptist Missionary Society, and besides the aid he kindly gave me in collecting the meteorological details tabulated before, he has added to the obligations under which I lie by contributing the following remarks:—

"Of the diseases prevalent amongst the natives about Chefoo, dyspepsia, affections of the eye and "skin, and winter cough stand in the front rank. Dysentery is occasionally met with in summer, and yields "readily to the treatment so deservedly lauded by my friend and colleague Dr. Myers. Ague is unknown in "the immediate neighbourhood, but to the south and west of the province where great plains allow the rains "of summer to settle down in the soil, it is not uncommon. During the past year I have seen ten or twelve "cases of leprosy presenting the ordinary features of the disease as enumerated by Drs. Müller and Manson "of Amoy, with the exception of tinea-like patches of skin. In two cases the influence of damp in causing "leprosy could be traced; one man slept in a wretched hut by the sea-shore where the floor was constantly "wet, and began to amend on removal to a dry locality; another traced his troubles to a soaking in harvest "time, when heated by over work. The latter case cannot be cited as an example of the effect of moist "climate, for the patient lives in a hill side village where wet weather is exceptional. From the other cases "no clue whatever could be obtained to the causation of the disease, and in all the cases family taint was "distinctly denied. In the way of treatment, cleanliness, avoidance of damp, abundance of clothing in "winter, and good food are recommended as essential, the tinctures of steel and iodine are given in a bitter "infusion, while externally, in accordance with a stray notice in a Shanghai paper concerning the treatment "of leprosy, I think in Bombay, patients are directed to anoint themselves night and morning with a "solution of one part of carbolic acid in eighty to a hundred parts of sesamum oil, sesamum oil being "chosen for economical reasons. Two cases in which, under constitutional means solely, ulcers were constantly "cropping out, have presented a sound skin for the last two months, and both patients affirm that they have "recovered sensibility to pain on pinching where it was previously absent. The only other point of interest

"I can think of is the efficacy of bi-sulphate of quinine as recommended by Mr. BADER in the *Lancet*, in cases "of granular eye-lids with pannus. A small quantity of the powder is lifted on the tip of a Chinese pencil "and placed inside the lower eye-lid. In a few days obstinate cases on whom nitrate of silver, sulphate of "copper and glycerine collyria have failed, have shown marked signs of improvement."

Epidemics.—I stated in a former part of this Report that I had only to record their absence; but I should perhaps describe under this head a partial epidemic of whooping cough which existed here last summer, but which was directly imported from Shanghai. With two exceptions the disease presented the usual appearances, and in these, though complicated with pulmonary affections, the ultimate result was most satisfactory. I may here call attention to the peculiar effect nitric acid appears to have in soothing and even cutting short the attack. I tried it first on the recommendation of a Dr. NOBLE who lately communicated his experience to the Chicago *Medical Journal*, although I regarded it only as perhaps as good a placebo as any for allaying maternal anxiety and complying with the universal demand for a prescription in a complaint which I have always thought was *per se* benefitted by no medicine. But I must confess that in some manner unknown to me this remedy really seems to have most speedy effect. I give the suggestion for what it is worth, as I am not as yet in a position—although I tried it in some severe cases—to deny that recovery was merely coincident with the use of the acid. Following the directions of the writer, I filled a tumbler with sweetened water "and poured in enough nitric acid to make it as sour as good lemonade," directing that the whole should be given to the patient in 24 hours. The writer says, "I have given a "drachm of nitric acid diluted in this way to a child six months old;" and he adds, with more emphasis than elegance of language, "an adult male can take an ounce per day and plow right along." I contented myself with acidifying the sweetened water to the standard my authority suggests, and I must repeat that the results were very favourable. In concluding his paper Dr. NOBLE says, "according to my experience" (and he has previously described this as being very large and extending over 9 years) "with the acid "treatment, if it is commenced early and continued regularly, the disease will terminate in between one and "three weeks and a half; and the patients will never whoop."

Before concluding this Report I desire to call attention to the existence in the neighbourhood of Chefoo, of sulphur springs which are most useful in the treatment of cutaneous diseases and rheumatism consequent on constitutional taint. Not only the Chinese (who crowd them) but numerous foreigners have to thank these baths for contributing largely to the cure of the diseases just mentioned; and in those obstinate cases of syphilitic disease where rheumatic, ulcerative or cutaneous manifestations are unaffected by the ordinary treatment, I have in many instances found a trip to the baths either quite sufficient or at least of such decided advantage as to render slight additional and subsequent treatment completely effective. The water bubbles out at a temperature of 112° to [illegible] Fahr., and preserves in the bath a uniform heat of about 100° Fahr. I am of opinion that more information as to the sanitary effects of these waters will show them to be most valuable adjuncts to treatment in those cases which are an ever constant source of annoyance to the physician, and most distressing and disheartening to the patient. I have not been able as yet to analyse the water, but I hope ere long to be able to obtain at least an approximate idea of the constituents to which it owes its virtues.

Chefoo may, unfortunately, be classed with the other ports in China as being a very fruitful source of enthetic disease. This is specially exhibited after general leave has been given from the vessels of war or merchant ships, and the type of disease communicated appears to be very similar to that met with elsewhere.

The Water Supply of Chefoo is decidedly unsatisfactory, chemical and microscopical examination proving it to contain much organic matter in solution and to be full of organisms. I account for this by the fact of there being here (as elsewhere in China) an almost total absence of circumscribed cemeteries, nearly the whole of the plain reaching back to the base of the hills being a vast graveyard through which all the water must percolate before getting access to the wells from which it is eventually drawn. And besides this I would mention the filthy surroundings of the wells, as also the utter disregard for cleanliness shown by the water-carriers themselves who dip buckets in a state of the most atrocious filth into the water for the purpose of removing dirt too palpable for even their usually callous senses to bear. Persons long resident

here appear to suffer but little inconvenience from this state of affairs, but the crews of ships taking water at the port quickly discover its deleterious effects by an almost immediate outbreak of diarrhœa on board. This is seldom serious in nature or very long in duration, but still it is assuredly sufficiently disagreeable to demand attention being turned towards removing a cause so palpable, while at the same time admitting of comparatively easy remedy.

To resume, I think that as a sanitary resort few places in the world can enter into competition with our favoured port, while as a residence for the western foreigner I defy any other country remote from the land of his nativity to present a locality possessing such a happy blending of all the climatic conditions essential to the preservation of health and vigour.

H.—Dr. A. G. Reid's Report on the Health of Hankow for the half year ended 31st March, 1872.

Throughout the preceding six months no examples of epidemic febrile disease came under notice at either of the missionary hospitals. Judging from the non-appearance of such cases and from the fruitless results of the frequent enquiries made by native assistants in the most likely quarters of the town, it may be assumed that if these disorders were present they must both have been mild* and have continued only for a brief period. In February there was a rise of from 20° to 30° in the maximum temperature, accompanied by a prevalence of malaroid disorders, chiefly of the intermittent and remittent type. In some cases of the remittent form which were treated in hospital, somnolence was an unusual feature; in two patients it required an amount of rough shaking to rouse them temporarily, and in a third, a little girl æt. 2, comatose symptoms were present, the pupils were contracted and inactive to light, the fontanelle open but not distended, pulse 130, morning temperature 103°. She was stated to have been ill two days and to perspire in the afternoon and during the night. Quinine was administered in full doses without regard to the periods of remission, and with successful results in all cases. The failure to discover any type of exanthematous fever is scarcely what might have been anticipated, knowing the filthy condition of the houses and streets, the density of the population and the poverty in many quarters of the native city. It might have been presumed that the haunts of enteric fever at all events would have come to light, seeing that the products whence its organisms are supposed to be derived and nourished abound in many directions. This will be readily acknowledged if allusion be made to two of the more active and constant sources of impurity, namely the emanations from the latrines and drains. The latrines are numerous in order to meet the want of a large resident population and of a considerable body of men engaged in traffic with the country districts. They have been constructed without regard to cleanliness, and no chemicals are employed to interfere with the results of decomposition. Their contents are allowed to accumulate for three or four weeks until the large, deep, open troughs underneath are filled, and they are then disposed of to the farmer or gardener, and carried to the jetties in uncovered buckets, occasionally during the day, but principally and according to rule during the night. While the process of emptying the troughs is going on, the neighbourhood is saturated with odours of the most intense description, and which defy the tolerance of even well blunted olfactories. In a schoolroom in the vicinity of one of these places I have known the boys who had never smelt fresh air obliged to have their nostrils stopped or compressed during successive days to exclude the stench. Notwithstanding the apparent undesirable character of the locality, in some cases private dwellings and even restaurants doing a thriving business may be seen attached to the latrines, and only separated by a wooden partition insufficient to oppose the entrance of polluted air.

The drains are from three to four feet deep and two in width. They run along the centre or side of the street, and most of them are intended to carry their contents to the neighbourhood of the vegetable gardens behind the city. Very few of them however succeed in this, as having no fall and admitting of a ready percolation of the fluid portion of their contents, they soon become blocked up by accumulations of mud and debris. The sides and base of the drains are usually formed of bricks laid without much care, and imperfectly fixed together; they are covered by the stone pavement of the streets which presents numerous interspaces for the escape of the gaseous products. In the better quarters of the city this covering is uplifted from time to time and the contents are transported away to be used as manure, or are employed to raise the street itself. From the courtyard or interior of the smaller houses and from the atrium of the larger ones there is generally a drain connected with the main channel, and as no means are provided to obviate the regurgitation of gases from the cesspools of the streets, these drains must contribute largely towards increasing the impurity of the houses. In several of the poorer quarters of the city there are merely open ditches, or

* Small-pox, which has been extremely rare this year, is not included.

gutters of wood in a semi-rotten condition, half filled with decomposing refuse and garbage, and exposing their nauseous contents close by the doors or even under the floors of the houses. It may be further added that throughout the city there are other spaces covered with the huts of recent settlers or of colonies of beggars, and which are entirely destitute of drainage. In these abodes squalor and poverty may be seen under their most intense aspects. Moreover during the rise and fall of the river the subsoil becomes saturated and gradually dried, thus affording another favourable opportunity for the decomposition of the refuse which may have become mingled with and retained in the upper layers of the soil.

These various prolific sources for the development of organic germs have been specially referred to in connexion with the absence of enteric fever, because it may happen that in time evidence may be collected to prove or contradict an important theory in relation to this fever which is held by many American physicians and by M. BOUDIN, namely that where malaria exists, or in bodies of men who have suffered from aguish fevers, there is neutralisation or tolerance of the enteric poison. In China many opportunities are offered for noting the combined effects of malaria and exposure to putrefying fæcal and other organic matter, but it would be premature to hazard an opinion from observations made in one city over a brief period of time. So far however as I have yet seen, there is certainly no evidence in the form of malarious fevers here to confirm the opinion expressed by Dr. HARLEY, that these fevers and enteric fever "are developed amidst the same conditions, and we therefore unhesitatingly conclude that enteric fever is "often a part of intermittent fever, and the converse."—REYNOLDS'S *System of Medicine*.

Several interesting cases were met with in hospital and private practice, and to these reference will now be made, followed by whatever remarks may suggest themselves.

Aortic Aneurism in a patient æt. 25. A tall, rather slight built man of temperate and active habits complained, in November 1871, of having suffered during several weeks from occasional attacks of pain in the cardiac region. The pains radiated towards the back, left shoulder, and down to the elbow joint. Physical examination disclosed increased impulse over left ventricle, apex of heart below sixth rib in line of nipple, and an obscure murmur at the base. It was considered to be commencing valvular disease and hypertrophy, and treated accordingly. The pains ceased to give trouble and were forgotten, but at Christmas there was a sudden onset of aphonia with congested fauces, husky cough and scanty mucous expectoration. These symptoms improved, and shortly after the New Year my patient proceeded to Shanghai on a pleasure trip, promising to do nothing to excite cardiac action. While in Shanghai his throat felt perfectly well and he considered himself to be in good health, but about the 4th February while on his return voyage to Hankow, he was seized with a recurrence of aphonia and also with vomiting coming on at uncertain periods of the day, without nausea or pain in the epigastrium. After his arrival here I re-examined him on the 6th February, and noted as follows:—Apex of heart at seventh rib external to line of nipple, murmur at base more distinct, and bruit likewise audible at apex, the former propagated along left border of manubrium and towards summit of left lung; carotid arteries jerking, slight dulness over inner left subclavicular region with comparative deficiency of respiratory murmur and vocal resonance, and like symptoms in upper left interscapular region. Aphonia without pain over larynx, congested fauces, scanty mucous expectoration. Temperature in axilla 97⅞°. Pulse 72, somewhat small. There was some emaciation, which was stated to have chiefly occurred within the previous week; there was a loss of 21 lbs. in weight since the beginning of the year. I was puzzled to reconcile the symptoms, and but for the absence of febrile indications would have set them down to the development of tubercle in the larynx and lungs. The patient was kept in bed and watched. It soon became evident that the left radial artery was rapidly diminishing in size, and had become smaller than the right, that a like difference now existed in the brachials and carotids, and that the intensity of the murmur at the base was increasing and was very audible near the first dorsal vertebra. The dulness was also more pronounced, and there was ere long a feeling of pulsation communicated to the dull region in front. The tracheal notch was deep, the pupils normal, no sensations of dysphagia or dyspnœa, no interference with the venous circulation, respiration not increased; scanty mucous expectoration and pain severe at times under the shoulder blade. The diagnosis of an aneurismal dilatation of the aorta near

the origin of the carotid and subclavian arteries was now arrived at, because no other tumour could have increased with such rapidity, and have so interfered with the circulation of the left side, without producing more evidence of implication of other structures. The patient was sent back to Shanghai, as I hoped that the general health might improve if the appetite returned by the change, which would tend to delay the fatal event. On the day after arriving in Shanghai, however, expectoration of blood set in, and death suddenly occurred the same afternoon while the patient was quietly reading in bed. Dr. HENDERSON performed a postmortem examination and kindly sent me the aneurism for inspection. Its relations are as follows:—A dilatation of the aorta from immediately beyond the origin of the carotid artery to the descending portion of the arch and involving the whole circumference of the vessel except its inferior border. The sac thus formed measures 2¾ inches in length and 1¾ inches transversely, and extends principally towards the apex of the lung, to the inner surface of which it is united by recent, easily broken adhesions. A long rupture had occurred in it close to the junction of the outer and upper surfaces, and a quantity of blood must have escaped directly into the cavity of the thorax, while another portion was extravasated into the bronchi and texture of the lung near the apex, and traversing the upper lobe till near its lower margin had there burst through the visceral pleura. The subclavian artery arose from below the middle of the posterior aspect of the sac; it was flattened and the calibre greatly diminished. The carotid artery was half twisted on itself near the origin and was overlaid by the projecting inner margin of the tumour. The vagus nerve was stretched almost transversely across the front, and was compressed in the soft adhesions between the outer surface and the lung; in a part of its course it lay within two lines of the interior of the sac, and its anterior pulmonary branches, as well as the phrenic nerve and sympathetic plexus, were matted below a mass of enlarged glands which were united to the thickened adventitia in front. The thoracic duct passed along the back, curved over and adhered to the upper border where it projected between the carotid and subclavian arteries. The interior of the sac was corrugated and scattered over with reddish patches of atheroma pulp which at some points had ulcerated into the artery and in other places had formed wavy fissures cutting more or less through the middle coat. One of these could be felt sharply dividing the diseased from the healthy artery, near the origin of the carotid. The atheroma pulp contained an abundance of nucleated cells, granules and oil globules. Between the corrugations there were pouches limited by a very thin transparent membrane, and free from atheroma. In the thoracic aorta there were two small patches of disease. The upper lobe of the left lung was condensed by hæmorrhagic effusion, and in the lower lobe there was a hard calcareous nodule about the size of a field bean. I am not aware of the condition of the other organs.

The foregoing case is an instance of an intra-thoracic aneurism running a rapidly fatal course at a much earlier age than is usual among civilians; and as several deaths have occurred in China during the past year from a like cause, it may not be out of place to allude to what is known concerning an obscure but interesting malady. The early age of the patient now referred to is exceptional, for out of 120 cases collected by LISFRANC and cited in COOPER'S *Surgical Dictionary*, only five were between 20 and 25 years of age, and it is not stated in what proportion of these the aneurism may have been on an external artery. In GAIRDNER'S *Clinical Medicine* also, of the cases selected as illustrative of this disease the youngest was 34 and the large majority over 40 years. But on the other hand in military life, aneurism and disease of the coats of the aorta are not rarely met with at a comparatively early age. This greater prevalence among soldiers has been interpreted by Dr. MYERS as due to the constriction of the blood vessels of the neck by the tight uniform, while the heart is vigorously acting during rapid and long continued drill. Another theory in explanation of the same prevalence has recently been put forth in a paper in the *Edinburgh Medical Journal*, which claims an additional impediment to the circulation through alteration of the aortic curve by the weight of the heart during exercise in the upright position. That mechanical obstruction of the circulation is of considerable importance in the causation of the disease is also shown by the greater frequency with which aneurism and aortic disease are produced in classes of men accustomed to severe and prolonged labour, such as forgemen, puddlers, Cornish miners, &c., men of powerful muscular development, in whom the systemic circulation is severely compressed while they are at work, and the blood

heaped up in the vessels of the chest stretching and gradually destroying the elasticity of the aorta, and leading to atheroma. Severe labour further reacts on the heart by inducing physiological hypertrophy of the organ, and as this is unaccompanied by compensatory strengthening of the coats of the aorta, that vessel becomes very liable to disease.

The influence of sudden strains and jars in the causation of the disease is viewed differently by writers on the subject. NIEMEYER holds that accidents like these "will not cause aneurism in a *healthy* subject, and "that in many cases acknowledgment of the immediate causes of the complaint is only forced upon the patient "by the examiner." Dr. ALLBUTT again, although considering that severe labour may tell more on the coats than on the valves of the aorta, yet thinks that the former may be healthy and be cracked by some sudden effort, to be succeeded by a saccular aneurism and subsequent atheromatous changes. In the patient whose case has been detailed neither mechanical obstruction of the circulation in any form nor cardiac hypertrophy were present, and from the position of the aneurism at the further bend of the arch, it is little likely that the vessel should there have yielded to a sudden strain, unless the coats had been previously altered in the same neighbourhood. Besides this, from the shape of the aneurism and from the atheromatous patches and fissures having been about equally distributed over the sac, and not particularly located near its internal boundaries, it may be assumed that the endo-arteritis did not result from a sudden strain rupturing the internal coat at one particular place, but that it must have been due to some constitutional cause which had altered the blood plasma and the nutritive changes going on in the textures. Of the general influences which predispose to arterial degeneration, hereditary tendency, free use of liquor, rheumatism and gout may be more or less powerful, but no trace of any of them could be discovered in the history of the present case. There is yet another poison, however, which materially alters the fluids and solids of the body, and which is more frequently met with in private practice in China than in England. I refer to syphilis. The effects of this poison on the arteries is thus given in the 6th Edition of AITKEN's *Science and Practice of Medicine* vol. ii. page 643. "With regard to the influence of syphilis, I may here observe that I dissected during four years "(at Fort Pitt and at Netley Hospitals for invalids) twenty-six bodies of soldiers, in each of which a distinct "history of syphilis was present, associated with unmistakable syphilitic lesions; and of these twenty-six "cases seventeen had the coats of the thoracic aorta impaired by characteristic changes—changes which are "uncommon at an early period of life, and which I have every reason to believe were due to syphilis—a syphil-"itic arteritis." It is also stated that in 114 postmortem examinations at Netley, there were 22 cases of atheroma of the aorta, and of these 17 had a syphilitic history, one was doubtful, and 4 had heart and lung disease. Of the 114, twenty-eight only had a syphilitic history, and 17 of these, or no less than 60.7 per cent, had atheroma. With such conclusive evidence of the tendency to the production of arterial lesions in syphilitic subjects, it need not cause much surprise if there be an excessive mortality and invaliding from aneurismal disease developed in China. The effects of Chinese and Japanese syphilis is thus alluded to by Dr. GORDON in a paper on the health of the army in the *Medico-Chirurgical Review* for January 1871:—"It is believed that "the form in which syphilis prevails in these two countries, being the most virulent to be met with anywhere, "tends to cause the frequency with which our troops are affected by diseases of the heart and blood vessels." In the present case, I found a nodule about the size of an almond near the base of the lung; it consisted of a hard calcareous kernel enclosed in a soft putty-like material, and was probably the remains of an old gummy deposit. Search was not made for like deposits throughout the condensed upper lobe, and I am not acquainted with the condition of the liver and other organs. The progress of the aneurism to its fatal end is now evident. At the time that the gummy tumour formed in the lung atheroma patches were probably formed in the aorta, but from the position of the disease exposing it less to cardiac pressure than if it had been developed in the ascending or anterior curvature, the coats of the vessel, although weakened, held out for some years, until the commencement of dilatation and relaxation of the vessel about November, whence the cardiac pains, irritable heart and depressed apex beat in that month. About Christmas the continuance of the enlargement led to irritation of the recurrent nerve and the aphonia which was supposed to be due to the congested larynx and fauces, and which disappeared throughout January. About the beginning of February there was a further enlargement, and pressure of the vagus between the tumour and the lung, followed by frequent

vomiting and a return of the laryngeal symptoms, and a little later on an increase in the upper border and anterior margin which suddenly altered the pulsation in the left carotid, diminished materially the size of the pulse, and caused the heaving communicated to the stethoscope in the inner infra-clavicular region. The absence of head symptoms, beyond severe pain in the frontal region for three or four days, is worthy of note, considering the interruption to the circulation through both the left carotid and vertebral arteries. The diagnosis of the disease was at first most obscure from the situation of the tumour, but if even suspicions had been excited, the truth might have been arrived at much earlier, by observing the tracings of both radial arteries and comparing the dicrotism and parallelism of the pulses.

Aneurism prevails with greater frequency in some countries than in others. BILLROTH remarks that "in Germany aneurism of the extremities is rare; it is somewhat more frequent in France and Italy, and "most frequent in England," and that "in Zürich atheroma of the arteries in old persons and gangrena senilis "are quite frequent, but aneurism of the extremities is rare."—*(Surgical Pathology)*. Dr. GORDON likewise, in the paper previously alluded to, states in reference to heart diseases among certain aboriginal populations that, "black and coloured troops enjoy an immunity from heart diseases in their rate of occurrence, but the "rate of mortality of these diseases is greater than among European troops. This is said to hold good with "Hindoos, Mussulmans, Caffres, Hottentots, West Africans and the half-castes of St. Helena. To explain the "fact, the ingenious theory has been propounded that those races which are most civilised, and whose "susceptibilities are most developed, are most liable to the affections in question. How far the explanation "is to be deemed satisfactory, I offer no opinion." There are no statistics available to determine the proportion of cases in which the disease in those populations affected the coats or valves of the aorta. In Hankow, judging from the experience of last year, I should say that aneurism of the extremities is also rare, although degeneration of the arteries is common enough. Only two specimens of external aneurism (femoral) came under my notice. Of internal aneurisms there were one of the ascending and one of the abdominal aorta, and I have at present under treatment in hospital a second example of aortic aneurism, the tracings of whose pulses differ materially. In either artery, the summits of the pulsations are not of equal height; in the right, the line of descent is immediately interrupted by a deep notch, and the first secondary wave rises higher than the level of the summit wave; the aortic notch is well defined, and the dicrotism considerably diminished; the line thence falls very obliquely, with one or two undulations. In the left, the ascent continues from the top of the first summit wave obliquely upwards to the first secondary wave without any distinct notch, and both the aortic notch and dicrotism are less evident than in the right tracing. The patient is fifty years of age, and some of the changes in the pulses are due to the atheromatous condition of the arteries. The pulsation of the heart is outside the line of nipple. There is visible pulsation in the second and third right intercostal spaces, dulness on percussion, deficient respiratory murmur, and loud rough bruit with the first cardiac sound, and loud booming second sound. The patient applied on account of œdema of the face, and had little or no complaint to make about his chest.

It would not give a correct idea of the frequency of thoracic aneurism among the natives to contrast the few cases met with in dispensary practice with those observed in hospitals, prisons, or in the armies at home, as the patients can be less closely watched here and doubtful cases can seldom be cleared up. The rarity with which it is met with in some of the latter places will be seen from the statistics of the New York Hospital, where over a period of five years from 1865 to 1870, six instances of thoracic aneurism were detected among a total of 11,344 patients. In the Queen's Prison at Brixton where the prisoners are under long sentences, and where their previous modes of life tend to produce arterial degeneration, there were eight male and five female deaths due to internal aneurisms during a period of fifteen years, and out of a daily average number of convicts amounting to 6,042.7 men and 1,059.4 women. The percentage of deaths to the total deaths was 0.61 for males, and 2.33 for females. HOLMES's *System of Surgery*, vol. iii. page 417.

MISCELLANEOUS CASES.

1.—A. B.; æt. 40; had suffered from syphilis in his youth; contracted a recent chancre which healed up without hardness or distinct enlargement of the glands. From the female who had communicated the disease, another adult at the same date contracted a hard chancre succeeded by an ordinary course of syphilis. In the former there supervened ostitic pains in the cranium and clavicles, with marked anæmia

and emaciation. On making an effort to break a thin bamboo rope, the right clavicle was felt to snap, and the arm could not be elevated. I saw the patient on the following day, and discovered a fracture passing obliquely from before, backwards and inwards near the outer third of the bone. Bandages and iodide of potassium were employed, and the fracture healed up without giving any further trouble, but with over-riding of the inner fragment, the point of which can be felt four inches from the sternal notch.

2.—C. D.; æt. 32; had been an oarsman on board a gunboat, and eighteen months ago was struck by his officer over the arm with a piece of bamboo. He continued at work for a month subsequent to this, but was than obliged to give up rowing, and since then has earned a livelihood by assisting some of the soldiers in chopping straw. It was not necessary to use the injured arm much, and it had ceased to give him pain until the previous month, when it began to trouble him somewhat, and also became swollen over the lower portion. On the morning of the day on which he applied at the London Mission Dispensary, while raising his arm to reach the back of his neck he felt the bone snap, and the arm fell useless by his side. The humerus was found to be fractured a little below the middle. Rectangular splints were applied, and in the fourth week when they were removed the swelling had disappeared except a hard mass of callus which united the bones. The patient denied having had syphilis, or being of intemperate habits, and there was no indication of scorbutus.

The first case is of interest as an example of the effects of venereal contagion on an individual who had previously passed through an attack of syphilis. It generally happens that complete immunity for the future is acquired when the system has been once impregnated with the poison of syphilis, but cases have been recorded where the symptoms recurred in regular order. (HILL *on Syphilis*, page 28.) In the present instance there had been no evidence of active syphilis for many years, but shortly after intercourse with a female, who communicated a hard chancre and the ordinary subsequent results to a virgin system, this individual exhibited a chancre free from hardness, but which was closely followed by erythema of the fauces, ostitic pains and hepatic enlargement. The freedom of the patient for so many years, and the return of symptoms shortly after exposure to contagion renders it almost certain that these symptoms were the effects of the fresh chancre and not a mere relapse of the old disease. The fracture of the clavicle under a trifling effort of strength is analogous to the cases alluded to in HOLMES'S *Surgery*, vol. ii. page 35, where it is stated that the humeri and even the thigh bones have given way under slight efforts in syphilitic subjects.

In the second patient I at first thought that malignant disease or inflammation might have attacked the seat of a former injury, and led to softening of the bone, and an easy destruction of its continuity. The separated ends felt enlarged, they slid freely over each other, and crepitus could be readily elicited by moderate lateral pressure. The treatment for fracture, however, was enforced and the patient kept under observation. No symptoms occurred necessitating the removal of the splints before the fourth week, and at that date the ends of the bone were found encircled and cemented together by a ring of callus. The patient was seen four months subsequently, and assured my native assistant that his arm had given him no further trouble. In connexion with these two cases I may mention that some years ago I met with fracture of the clavicle in a marine who had fired many rounds at a target one afternoon, and who on returning on board ship, complained of severe pain in the shoulder. He was suddenly awakened in the night by an aggravation of the pain, and on trying to get up found that he could not use the arm. When seen in the morning the clavicle was found to be broken.

3. *Amputation of forearm.*—A soldier while loading a gingal in which there was some ignited powder, had his hand and wrist blown to pieces. The lower part of the forearm being also scorched, amputation was performed through the upper third by antero-posterior flaps. The wound was treated antiseptically and soon recovered. He remained a fortnight in hospital.

4. *Amputation at ankle joint.*—A female; æt. 26; had suffered during five years from disease of the metatarsal bones of the right foot. The plantar and dorsal surfaces of the foot were one large ulcerating mass, but sufficient heel pad was left to form a flap. SYME'S amputation was performed. From the compression which the foot had previously undergone, the neck uniting the flap to the leg was extremely narrow, but the flap itself was loaded with fat and with abundant blood vessels. The operation was performed under carbolised spray, and the antiseptic paraphernalia used. A rapid recovery ensued.

5. *Amputation through both legs.*—A girl; æt. 6; the daughter of the superintendent of an opium shop, was brought to the London Mission Hospital by her father, suffering from frost bite of half the right

foot, and of the toes of the left. He was informed of the consequences that would result, but refused to leave her in hospital, adding that a child with half a foot was useless to him. In the course of a month afterwards I saw the same child at the convent with both feet completely gangrenous. The woman who carried her to the convent stated that she had been lying exposed on the streets for two days and nights. The child was now reduced to an extreme condition of emaciation, the face was swollen and there were bronchitic râles in the lungs. Lines of demarcation had commenced close above the ankle joints, and there was an abundant discharge of matter. I performed amputation through both legs by long anterior flaps with very short posterior ones. The operation on the right leg was conducted under carbolised spray, catgut ligatures were employed to secure the vessels, and the instructions given by Mr. LISTER were faithfully carried out in stitching and dressing the wound. The left stump was treated in the ordinary manner with wet lint, and subsequently with chloride of soda and zinc lotions. The former had completely united in 10 days, the latter required a little over three weeks before firm union took place.

Patient No. 4 assured me that previous to the onset of disease in the foot she had frequently walked a distance of 60 *li* without fatigue in one day, and from enquiries made among dispensary patients there is no doubt that bandaging of the feet, as done in the country districts near here, does not interfere so seriously as is often imagined with progression. Walking is almost entirely dependent on the heel of the foot, the knee joint is kept rigid, the calf of the leg atrophies, but the muscles of the thigh become well developed. In the present case bandaging had been commenced at the customary age, namely the fifth year. The healthy foot measued 5 inches in length, the ball of the toe and the heel approximated to each other, and were separated by an abrupt cleft $2\frac{3}{4}$ inches in depth, which represented the arch of the foot. Rolling of the foot is effected by means of a cotton bandage, 4 yards long and 3 to 4 inches broad, wound round the foot and ankle, and reversed so as to make it lie smoothly. The period necessary for accomplishing the wished for alteration in shape may be judged from the following examples:—Æt. 5, foot rolled 2 months, length $5\frac{1}{2}$ inches; inner border perfectly flat, surfaces of outer metatarsal bones inclined outwards, and the corresponding phalanges downwards and inwards. Æt. 5, rolled 6 months, 5 inches in length, four outer toes turned under foot, the points being nearly in a stranght line parallel with, and almost reaching to inner border. Æt. 8, rolled for 1 year, length $4\frac{1}{2}$ inches; points of toes at inner border of foot, ball of big toe and heel approximated so as to raise the arch of the foot into a narrow cleft like form. The posterior surface of the os calcis is anterior to a line dropped perpendicularly from the posterior border of the external malleolus. Æt. 20, foot 3 inches in length, ball of big toe can be made to touch anterior margin of heel, and with slight force the tip of the toe can be applied to the posterior border. The metatarsal bones descend perpendicularly from their tarsal articulations, and the os calcis feels as if in the erect position.

On laying open the foot which I had removed, it was found to be loaded with fat, and the muscles were not more wasted than is usual in the disease. The longitudinal arch rose abruptly to a height of $2\frac{1}{2}$ inches from the internal tuberosity of the os calcis to the scaphoid, and thence descended by a less perpendicular line to the head of the metatarsal bone, the former and the latter being 2 inches apart. At the outer border the greatest height was $1\frac{3}{4}$ inches near the tuberosity of the fifth metatarsal. The lateral curvature of the anterior row of the tarsus was increased, and the middle cuneiform was forced upwards. The metatarsal bones descended almost perpendicularly from their tarsal articulations, and met the phalanges at right angles. The dorsal ligaments connected with the anterior row of the tarsus were exceedingly lax, and were only rendered tense by the forcible approximation of the tuberority of the os calcis and the head of the first metatarsal bone. The *astragalus* was bent so as to increase the saddle shaped appearance of the bone, the fibular side of the superior articulating surface being considerably higher than the tibial. The external facet was triangular but not larger than the internal. Behind each facet the depressions for the lateral ligaments were deeply marked, and so likewise was the groove for the tendon of the flexor longus pollicis which passed straight down the broad, thickened posterior surface. The neck was extremely short, the head of the bone being close to the superior articulating surface above, and only separated below from the posterior facet by a deep narrow groove. The inferior anterior facet and the head of the bone were covered with one continuous cartilage. The projection of the *os calcis* forming the heel was bent downwards and also inwards, increasing the concavity of the inner surface. The greater process was shortened, bringing the articulating surface for

the cuboid close to the large external facet. The internal facet was high and crescentic, and extended more than half way aross the greater process. On the inferior surface the external and internal tubercles were less prominent than usual, and were united by a ridge of bone. The tubercle for the attachment of the short plantar ligament was well developed. The anterior articulating surface was broad transversely, and deeply concave. The *scaphoid* was of small size, the posterior articulating surface comparatively shallow, internal facet on anterior surface hollow, and two external ones prominent and somewhat rounded; large facet for articulation with the cuboid continuous with the former. The *cuneiform bones* were of small size, and carious, many of the facets being destroyed by disease. The anterior facet of the internal cuneiform was marked by a longitudinal, rounded ridge which fitted into a concavity in the head of the first metatarsal. The depressions for the interosseous ligaments were deep, and gave prominence to the facets. The posterior facet on the internal surface of the external bone was elevated and somewhat rounded, and fitted into a concave surface on the middle cuneiform; the anterior surface was bent forwards, and the facet for articulation with the cuboid was continuous with that for the scaphoid. The *cuboid* was narrow transversely, the posterior half being bent forwards, deepening the groove for the tendon of the peroneus longus. The external surface was reduced to a sharp ridge separating the posterior surface from the articular surface for the fifth metatarsal, and fitting into a notch in the eminence of the latter bone. The anterior facets were prominent, looked outwards and were curved from above downwards. The posterior articular surface extended from the tip of the tubercular eminence to the ridge representing the external surface; it was deeply concave towards its external, and convex towards its internal border. The facets on the internal surface were separated by a narrow ridge over which the cartilage was continuous. The shafts of the *metatarsal bones* were extremely slender and somewhat rounded. The heads of the second and third projected beyond the others; those of the fifth and fourth formed a concavity into which the cuboid sank. The facets were destroyed by disease.

6. *Strangulated Inguinal Hernia.*—The hernia was a congenital one, but had been reducible until the evening before admission. It had since that date defied the efforts of companions, and several of the native faculty. The sufferer was a military officer, and when brought to hospital was in the greatest agony. The scrotum was so discoloured and swollen from the severe handling to which it had been subjected, that at the first glance it looked like a case of extravasation of urine. Chloroform was administered, and the sac was laid open in the usual manner under antiseptic spray. More than a foot of congested dark looking bowel and a large piece of omentum filled the sac. The former was returned, but a portion of the latter had to be cut away. Considerable tenderness persisted for some days over the right side of the abdomen, but the patient was kept under the influence of opium, and in ten days recovery had taken place. The testicle was forcibly drawn up by the cremaster into the inguinal canal, and was with some difficulty kept in the scrotum.

This was the only instance of a strangulated hernia met with during the past year, and as rupture is not an unfrequent complaint I made enquiries among native practitioners, hoping to learn whether or not they ever employed acupuncture to effect reduction. I found that in Hankow this mode of treatment is rarely employed for any disease, except by a few practitioners from Hunan. In cases of scrotal swellings attended with much pain, whether they be due to hernia or to hydrocele, the needles are not passed directly into the tumour, but are inserted a short depth into the wall of the abdomen on the left side midway between the umbilicus and the anterior superior spine of the ilium, or a little in front of the cartilage of the ninth rib, or into certain parts of the leg or foot. It is believed that in these situations there are special gateways which allow a superabundance of air to esape, which is supposed to have collected in quantity in the textures of the scrotum, and impeded the circulation. I was assured that the needles shown me, which were of silver and about the size of a darning needle, were never passed more than a quarter of an inch in depth, and most frequently only about one-sixth, and that these shallow punctures were the only kind resorted to by those who here followed this mode of treatment. These instruments are far too clumsy to admit of puncturing the bowel with safety in intestinal pneumatosis or in strangulated hernia. Among hospital patients I have met with some examples of harmless punctures in the extremities or over the ribs, but not with the serious kinds seen in other parts of the empire, and which Hunan medical men inform me are resorted to in their native province.

7. *Ear almost completely detached.*—A thief was caught lurking near an officer's tent on the city wall whence some articles had been abstracted a few days previously, and being considered the guilty man

an ear was ordered to be cut off. To increase the sufferings of the victim, the pinna was left adherent by a narrow tag of the lobule, so that a period might elapse before the organ completely dropped off. The unfortunate wretch gave such trouble to the soldiers, that on the third day one of them brought him to the hospital to see if anything could be done for him. The meatus was severed through, and the auricle dangled on his neck as he moved about, but with the exception of the upper border of the helix it looked healthy. I therefore freshened the wounds, carefully stitched together the meatus with carbolised silk, and employed antiseptic treatment. Complete union ensued, but an ulcer was left at the upper border, and as it was slow in healing, five small centres of skin were taken from the arm and fixed to the sore with isinglass plaster secured by bandages. In three weeks there was perfect recovery, and the patient left with all the external appearances of an honest man.

8. *Laryngeal fistula from cut throat.*—The patient had been ordered to repair the road in front of his cottage, but failing to do so, the servants of the mandarin came to bring him before the official. He retired into a back room and attempted to commit suicide by cutting his throat with a razor. The wound, which had extended across the front of the neck, had cicatrised, leaving an opening an inch long immediately above the vocal cords, the movements of which were visible. The extremities of the wound united after having been pared and stitched, but a constant expectoration of mucus kept the centre open; it healed ultimately under nitric acid applications.

9. *Gunshot injury.*—A general while leading his troops against a body of rebels in Yunan received a bullet wound in the lower part of the back of the leg. After many months of suffering the bullet was discharged, but since then (a period of five years), the wound had from time to time broken out afresh, and unfitted him for duty. While passing through Hankow en route for Pekin, deep suppuration occurred under the muscles of the calf, and as he experienced no relief during ten days of native treatment, he was brought to hospital by his relatives. The patient was 60 years of age, extremely emaciated, and exhausted by his sufferings; the leg was swollen from the knee to the ankle, and was covered with plasters. Chloroform was administered, and incisions were made above and below; through the latter the finger could detect a piece of loose bare bone; this was removed, a drainage tube was passed from one opening to the other, and a current of weak carbolic acid solution was frequently kept up through the tube. He remained in hospital about a fortnight, when he left on crutches with the leg healed, but still too weak for walking.

10. *Gunshot injury.*—A cavalry officer while retiring up a hill before a rebel force received a wound in the lower and outer part of the thigh. The bullet traversed the thigh and lodged in the head of the fibula, leading to inflammation of the knee and acute flexure of the joint. With the probe the bullet could be felt located in the expanded head of the fibula. It was extracted and the loose pieces of bone cleared away. After this the wound entirely healed. An attempt was then made to straighten the leg under chloroform, but this failing, the flexor tendons were divided. The limb could thereafter be forced into the extended position, and was secured in a wire splint. The man remained in hospital about a week, always expressing his belief that a spontaneous cure would ensue now that the bullet was gone. He disappeared with his friends one morning, much to my regret, to undertake a long journey back to Hunan, so soon after the severe treatment applied to the knee joint.

11. A countryman entering one of the city gates three years ago while the soldiers were firing at a target on the wall, was wounded in the front of the leg, and had since been reduced to beggary, being unable to work on account of repeated abscesses in the same situation. The bullet could be felt lying deep between the bones, and was easily extracted. It weighed an ounce. Recovery followed.

12. *Excision of elbow joint.*—A labourer was wounded in the elbow joint two years ago; the bullet had dropped out, but acute inflammation and anchylosis in the straight position ensued, and the limb was comparatively useless. The wound also had recently opened up, and the probe could be passed down to bare bone. Excision by a straight longitudinal incision was performed, and recovery with a tolerably flexible joint ensued.

These cases of gunshot injury being all of long standing, illustrate the chances of recovery even in the simplest instances treated by the native faculty. Two of the patients were men of means, had consulted numerous doctors in different provinces, and had used a variety of plasters guaranteed to draw the bullets

out, but nevertheless remained cripples until relieved by easy enough operative treatment. The cases made a very strong impression at the time on both the patients and their friends, and it is possible that if they came more frequently under the care of foreign surgeons we might soon see a knowledge of surgery a desideratum on the part of the army officials. If the wishes of the soldiers themselves might be judged of by their frequent attendance at the dispensary and by their residence and excellent behaviour while in Hospital, they would gladly welcome native doctors possessing the foreign art.

13. *Abscess of the liver.*—A labourer had suffered for more than a month from hepatic pains which unfitted him for work, and during the last week he noticed a hardness stretching from the right hypochondrium towards the epigastrium. Judging this to be an abscess forming, he was requested to remain in hospital. He however had some arrangements to make at home, but returned in a fortnight. The liver dulness was then normal, except at the lower border inside line of nipple where it stretched for three and a half inches into the epigastrium, and measured nearly as much in breadth. It felt hard and tender, while near the centre the skin had a reddish appearance. Over this latter point potassa fusa was firmly applied, and the eschar covered with lint soaked in carbolised oil. The following morning the eschar was divided and the caustic reapplied, followed by similar after-treatment, and this was repeated a third time. On the evening of the day on which this was done my native assistant came to inform me that matter was escaping from under the dressing, and I immediately removed it and gently pressed the abscess while a stream of disinfectant solution was kept flowing over the opening. I then injected the cavity with the same solution and applied antiseptic dressing. This was repeated daily till in a few days all discharge had ceased. Under the use of iodine and muriate of ammonia, hardness disappeared, and a good recovery ensued.

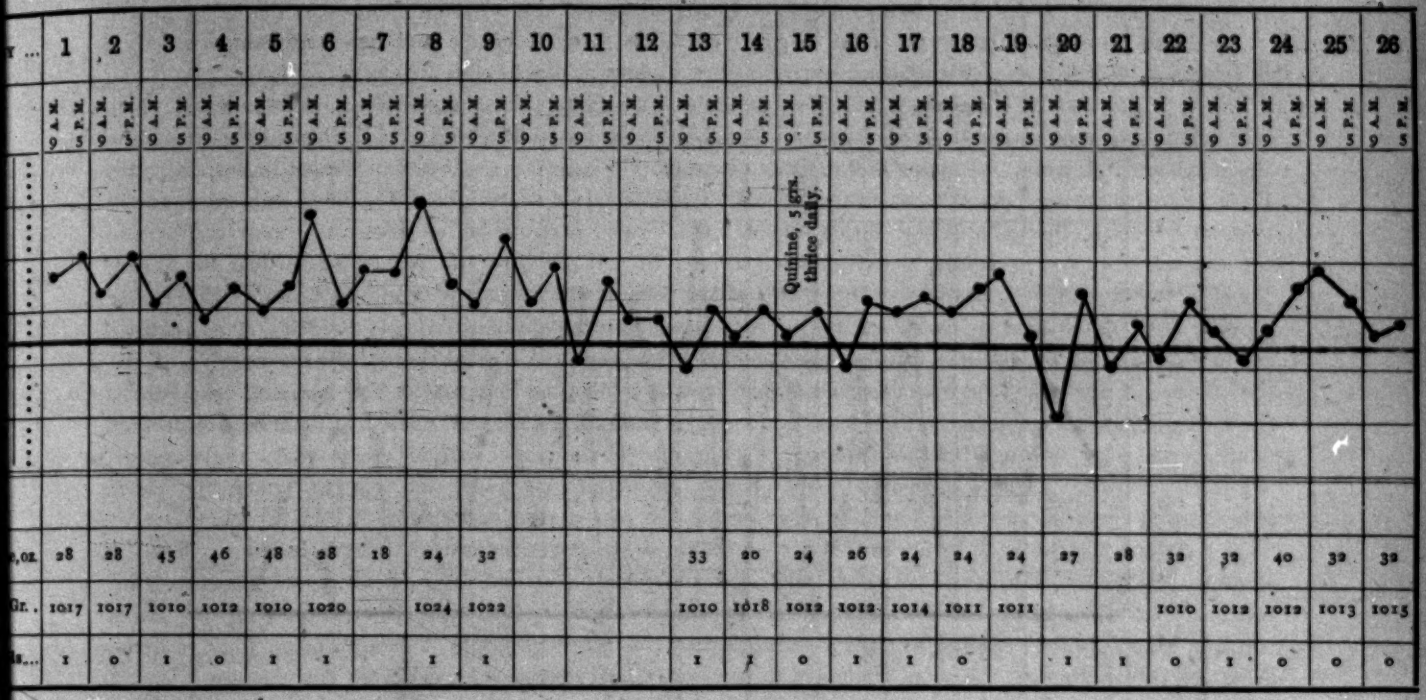
Hepatic abscess is very rare in this part of China, so far as yet noticed by foreign observers. Yet the summers are hot and the weather variable, the natives extremely poor and exposed to the inclemencies of the seasons, while their habits are less distinguished by sobriety than is often supposed. Respecting this latter point and the kind and quantity of spirit consumed by the country people, I hope to bring forward some facts in a future Report. Among foreigners in past years two deaths occurred from this disease. One of these was similar to the above, but before local treatment by caustic had been begun, the abscess burst into the abdomen while the patient was at stool. In the second case, the nature of the complaint was not suspected till the patient was in extremis. The abscess was then found pointing between the eighth and ninth ribs in the line of the axilla, and causing the most intense agony, while hectic fever had completely exhausted the poor sufferer. The abscess was punctured with a trocar, and a breakfastcupful and a half of pus escaped. The patient experienced great relief, but gradually sank, and died on the fifth day. In cases like the latter, emptying the cavity with a suction syringe, and employing antiseptic dressing ought to afford a good chance of recovery, if undertaken at the proper moment.

Tumours.—Eleven tumours were removed, and of these seven were cysts filled with a semi-solid material. Of the others one was a large fibro-cystic tumour occupying the posterior digastric space and parotid region, and producing great deformity; the second was a neuroma on the posterior interosseous nerve of the forearm, attended with such severe lancinating pain that the patient had given up work for more than a year; the third was a fatty tumour weighing 5 lbs. over the right scapula, and the fourth was a small fatty tumour the size of an orange situated over the left temple. In this last case the patient was otherwise rather good looking and was a civil mandarin wearing a blue button. He had in vain tried the native faculty in Soochow, Shanghai and one or two other places but was at last recommended to the foreigners by the native Deputy-Superintendent of Customs. By the use of RICHARDSON'S spray producer the tumour was removed without causing pain, and the thanks of the man and the astonishment of his companions sufficiently attested the value they placed on a very trifling operation. The wound healed by the first intention, and in less than a week the patient had returned to his post, pleased with the improvement in his personal appearance.

Among minor operations, there were eight cases of fistula in ano successfully treated, four of hemorrhoids deligated, and four of hydrocele injected with iodine. There was also a patient with a cyst in either testicle containing a milky looking fluid, coagulating by heat, faintly acid, sp. gr. 1030, full of masses of cholesterin crystals and round cells, but without spermatozoa. The right cyst contained nine, and the left five ounces of the fluid. They were treated like hydroceles and disappeared.

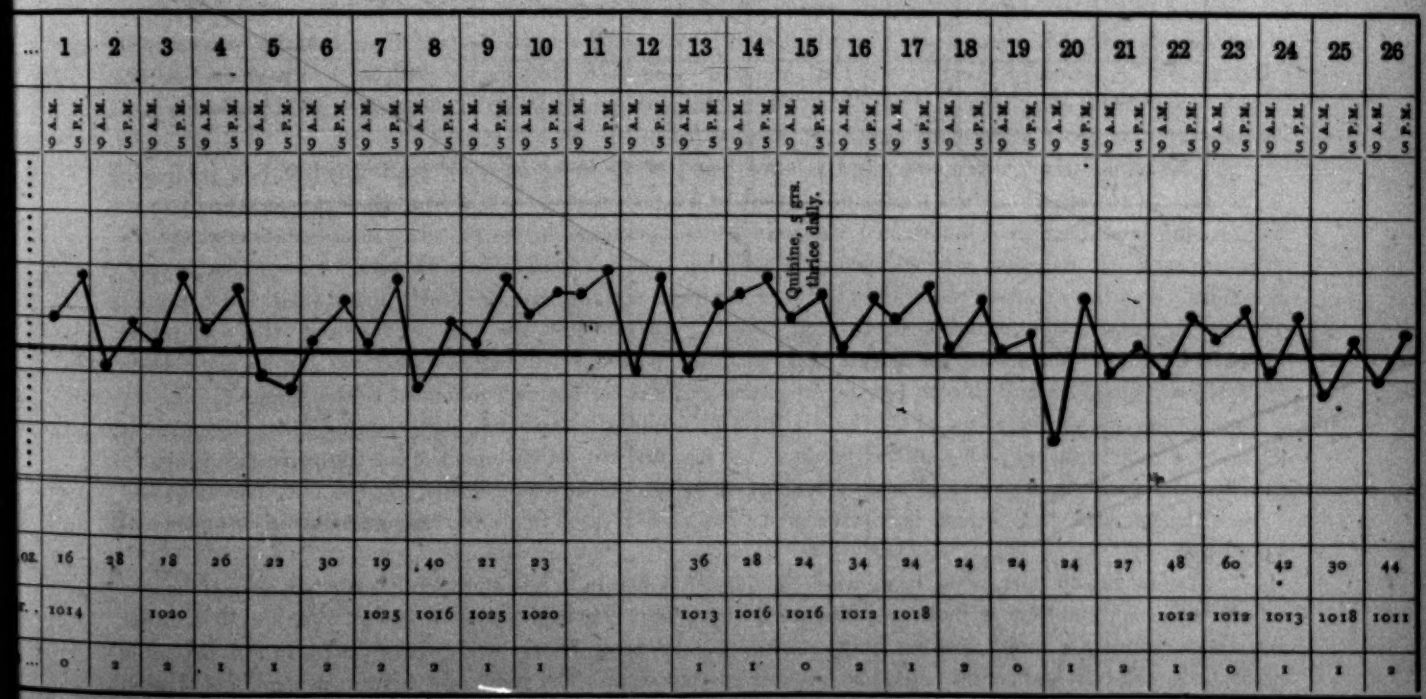
DIAGRAMS showing the Morning and Evening Temperature, taken in axilla, in three cases of Anæsthetic Leprosy.

No. 1.



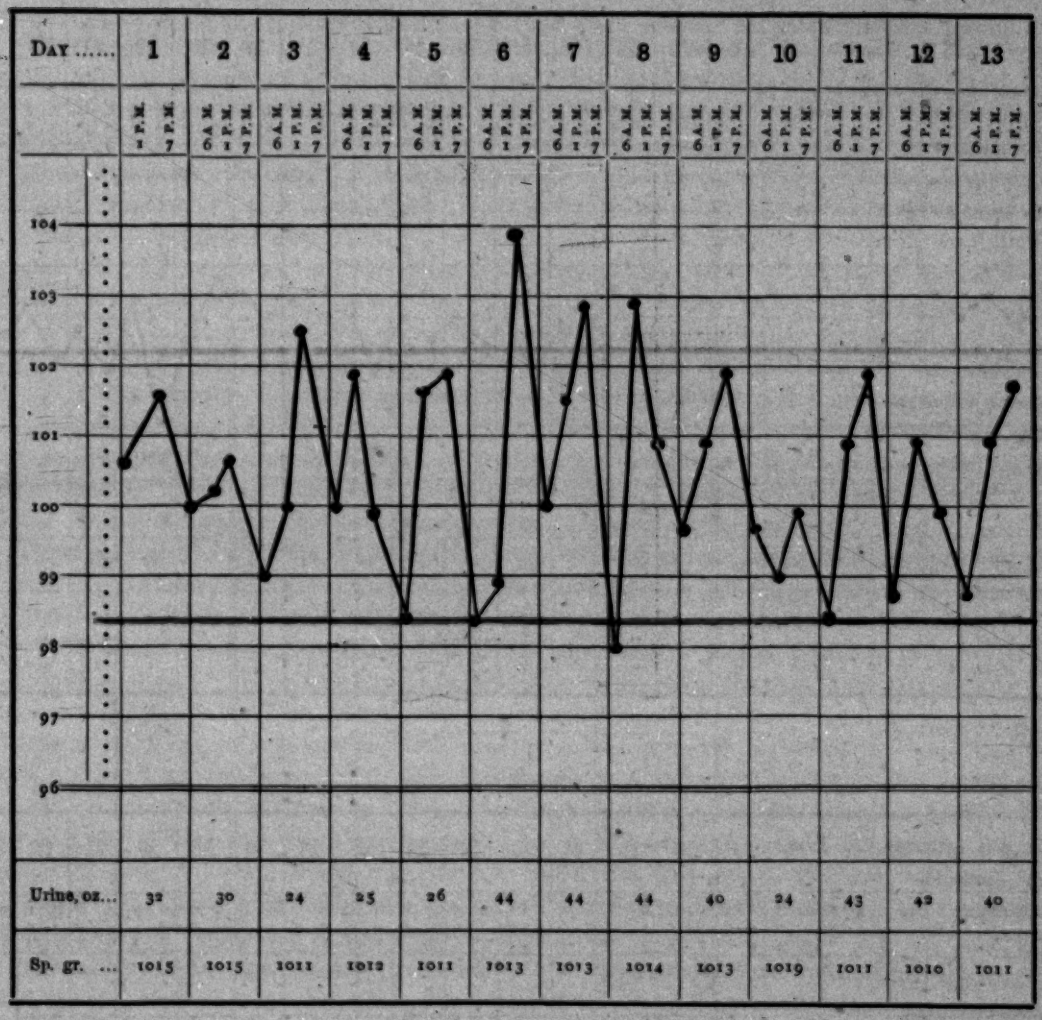
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A.M. 9																										
P.M. 5																										
,oz.	28	28	45	46	48	28	18	24	32				33	20	24	26	24	24	24	27	28	32	32	40	32	32
Gr.	1017	1017	1010	1012	1010	1020		1024	1022				1010	1018	1012	1012	1014	1011	1011			1010	1012	1012	1013	1015
...	1	0	1	0	1	1		1	1				1	1	0	1	1	0		1	1	0	1	0	0	0

No. 2.



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A.M. 9																										
P.M. 5																										
oz.	16	38	18	26	22	30	19	40	21	23			36	28	24	34	24	24	24	24	27	48	60	42	30	44
r.	1014		1020				1025	1016	1025	1020			1013	1016	1016	1012	1018					1012	1012	1013	1018	1011
...	0	2	2	1	1	2	2	2	1	1			1	1	0	2	1	2	0	1	2	1	0	1	1	2

No. 3.


Day 1 2 3 4 5 6 7 8 9 10 11 12 13
A.M. 6 P.M. 1 P.M. 7
104
103
102
101
100
99
98
97
96
Urine, oz... 32 30 24 25 26 44 44 44 40 24 43 42 40
Sp. gr. ... 1015 1015 1011 1012 1011 1013 1013 1014 1013 1019 1011 1010 1011

J.—Dr. Scott's Report on the Health of Swatow for the half year ended 31st March, 1872.

The following table indicates the diseases which have come under my notice among foreigners during the half year.

	October.	November.	December.	January.	February.	March.
A.—Zymotic Diseases.						
I. *Miasmatic Diseases:*—	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Intermittent Fever,	10	12	2	6	4	9
Diarrhœa,	3	7	2	2	5	11
Dysentery,	2	1	2	2	2	1
Ophthalmia,	1	3	—	2	2	—
Diphtheria,	—	—	1	1	—	—
Anthrax,	—	—	1	—	—	—
Boils,	2	2	3	—	—	—
Influenza,	—	2	1	2	4	—
Erythema,	—	—	—	1	—	—
Erythema Nodosum,	—	—	—	—	—	1
II. *Enthetic Diseases:*—						
Syphilis,	—	13	4	8	7	5
Periostitis,	—	—	—	1	—	—
Iritis,	1	—	—	1	—	—
Gonorrhœa,	7	8	7	4	6	9
Bubo,	2	—	1	—	3	—
Orchitis,	1	—	—	—	2	4
Epididymitis,	—	1	—	3	—	—
Stricture,	—	1	—	—	—	—
Phymosis,	—	—	—	—	3	4
III. *Dietic Diseases:*—						
Intemperance,	—	1	1	1	1	—
IV. *Parasitic Diseases:*—						
Scabies,	1	—	—	—	—	—
Tape Worm,	—	1	—	—	—	—
Round Worm,	—	—	—	—	—	1
B.—Constitutional Diseases.						
I. *Diathetic Diseases:*—						
Rheumatism,	2	4	1	5	—	3
Anasarca,	1	1	—	—	—	—
Asthma,	—	1	—	—	—	1
II. *Tubercular Diseases:*—						
Phthisis Pulmonalis,	—	2	—	—	1	—
Hæmoptysis,	1	—	—	—	—	—
C.—Local Diseases.						
I. *Diseases of the Nervous System:*—						
Otitis,	—	1	—	—	—	—
Sciatica,	—	—	1	—	—	—
Neuralgia,	—	—	1	1	1	1
Delirium Tremens,	—	—	1	—	1	—
II. *Diseases of the Circulatory System:*—						
Disease of Mitral Valve,	—	1	—	—	—	—
Angeioleucitis,	—	—	1	—	—	—
III. *Diseases of the Respiratory System:*—						
Bronchitis,	1	—	—	—	5	—
Pneumonia,	—	—	1	—	1	—
Congestion of Lungs,	—	—	—	1	—	—

	October.	November.	December.	January.	February.	March.
C.—Local Diseases.—*Continued.*						
IV. *Diseases of the Digestive System:*—	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Pharyngitis,	1	—	—	—	1	2
Peritonitis (acute),	—	—	—	1	—	—
Gastritis,	1 *	1	—	2	3	—
Enteritis,	—	1	—	—	—	—
Dyspepsia,	2	4	—	1	2	3
Jaundice,	—	1	—	—	—	—
Colic,	1	—	—	—	—	—
Congestion of Liver,	—	—	—	—	3	—
Hepatitis,	1	1	1	1	—	—
Piles,	—	2	1	—	—	—
Strangulated Femoral Hernia,	—	—	—	—	—	1
Toothache,	—	2	—	—	—	—
V. *Diseases of the Urinary System:*—						
Nephritis,	—	—	1	1	—	—
Cystitis,	1	—	1	—	—	—
VI. *Diseases of the Generative System:*—						
Spermatorrhœa,	—	1	—	—	—	—
Orchitis,	—	—	1	—	—	—
VII. *Diseases of the Locomotive System:*—						
Caries of Femur,	1	—	—	—	—	—
Periostitis,	—	1	—	—	3	1
VIII. *Diseases of the Integumentary System:*—						
Eczema,	1	2	—	—	—	2
Abscess,	1	—	2	2	6	—
Onychia Maligna,	1	—	—	—	—	—
Ulcer,	1	—	2	1	—	—
Warts,	—	1	—	—	1	—
Paronychia,	—	—	2	1	1	1
Corns,	—	—	—	1	—	—
Pernio,	—	—	—	1	—	—
Herpes Zoster,	—	—	—	1	—	—
Acne,	—	—	—	1	—	1
IX. *Diseases of the Eye:*—						
Hordeolum,	—	—	—	1	—	—
Pterygium.	1	—	—	—	—	—
Corneitis,	—	1	—	—	—	—
Iritis,	—	1	2	—	—	1
D.—Developmental Diseases.						
II. *of Women:*—						
Miscarriage,	2	—	—	—	—	1
Leucorrhœa,	1	—	—	—	2	—
Menorrhagia,	—	—	1	—	—	—
Dysmenorrhœa,	—	—	—	2	1	—
IV. *Diseases of Nutrition:*—						
General Debility,	—	—	5	—	—	—
E.—Lesions from Violence tending to Sudden Death.						
I. *Accident:*—						
Heat Apoplexy,	1	—	—	—	—	—
Contusion,	3	2	4	—	1	2
Sprain,	—	1	—	1	1 *	—
Drowning,	—	—	1 *	—	—	—
Rupture of Perineum,	—	—	1	—	—	—
Burn,	—	—	—	1	—	1
Fracture of Skull,	—	—	—	1	—	—
Wound of Abdomen with Protrusion of Viscera,	—	—	—	1 *	—	—
Frost Bite,	—	—	—	—	—	1

Of the cases tabulated above, 5 were fatal. These are marked with an asterisk. The case of gastritis in October had been under my care for a long time, and at last died suddenly with all the symptoms of perforation of the stomach following ulceration. The case of abdominal wound with protrusion of the viscera was hopeless from the first. The subject of it was stabbed with a knife on the left side between the umbilicus and the lower ribs. When I saw him some hours after the accident, 8 or 10 inches of the small intestine was protruding, and this was thickly coated with mud or some similar substance which had been plastered over it by a Chinese "doctor," who had been first summoned, and who, failing to retain the bowel after returning it, had adopted this plan of treatment. Having gently washed this coating away, I found that the gut was injured in three places, undigested food and much fluid passing through the wound. The injury was close to the stomach, for water, which the patient drank freely, was poured out almost as soon as it was swallowed. Awaiting a consultation with Dr. KUNDÉ and the late Dr. THOMSON, I injected 2 grains of morphia into the arm. When we met we agreed that the only chance, and a very poor one, was to allow the protruded gut to slough off, and establish an opening outside at the seat of the wound. Violent inflammation had already set in, and to stitch the wound in the bowel, and return it with an uncertain amount of the Chinese "doctor's" dirt, would have inevitably resulted in death. The patient died after lingering for 6 days, during which time large quantities of morphia were injected with little effect except that of relieving pain. As much as 10 grains daily did not produce sleep. The fatal case of pneumonia in February came under my care only a few hours before death. Both lungs were affected, and when I saw the patient the temperature in the axilla was 108°, pulse 156, and respiration 56.

There was thus a total of 394 cases of disease during the 6 months. Excluding the 2 cases of drowning and the one case of stabbing, there were but 2 deaths from disease.

K.—Dr. George SHEARER's Report of selected cases seen at Kiukiang during the half year *ended 30th June*, 1872.

I.—*Continued Fever* (Typhus mitior); *Crisis about the 14th day: Convalescence interrupted by an attack of latent or masked pneumonia: Resolution of the same within a period of 7 or 8 days.*—J. A.; aged 21; Marine on board H.B.M.'s gunboat *Dove*; seen for the first time on February 10th 1872, with febrile symptoms. He wore a haggard, pinched and drooping expression, was somewhat confused in his intellect, had lost his appetite and strength, and felt 'sore all over.' The tongue was moist and covered with a white fur, the pulse somewhat quickened, but at the same time exceedingly small and depressed. Ordered a stimulant mixture of bark and ammonia.

Feb. 11th. Lay thoroughly prostrate and helpless in his hammock; the pulse manifesting a certain degree of reaction, being 90 and fuller and stronger.

Feb. 12th. Febrile symptoms more marked; mind more confused. Has difficulty in articulating properly, and his tongue is more dry and furred. Pulse 100. Captain JONES informed me that he had been ailing and drooping for above a week past, and that the first thing he noticed amiss with him was his inability to go through his exercise (at cutlass drill), seeming to forget the orders immediately they were delivered. There is incipient mottling of the surface of the abdomen, from which I judged it to be about the 10th day of the fever. Brought into sick quarters on shore in the evening, after which the pulse rose to 112, with free perspiration.

Feb. 13th. *Morning.*—No delirium or rambling during the night; pulse 120. Tongue covered with a moist silvery-white fur and bearing impressions of the teeth. Mottling less distinct. To have beef tea and wine at frequent intervals, bread and milk, and vinegar sponging. *Evening.*—Bathed in perspiration. Pulse 130, full and continuous so as hardly to be counted. Has been rambling and talking of his friends in London. Neither retention nor incontinence of urine, and bowels moved daily. There is slight bronchial irritation, and slight expectoration of frothy phlegm. Takes beef tea, bread and milk and port wine. Imperial drink ad libitum. A mustard and linseed cataplasm to be applied to the chest; brandy and egg-flip during the night, with orders to change his position from side to side at frequent intervals so as to avoid decumbency on the back.

Feb. 14th. *Morning.*—Perspired very profusely during the night and especially after taking the brandy-flip (4 oz.) and applying the cataplasm. This morning the skin is merely bedewed with a fine moisture. Tongue moist, and mouth full of saliva, the extrication of which gives him much trouble. Rambled a good deal during the night without being delirious, and passed water unconsciously once. During the night took 4 glasses of port wine and 4 ounces of brandy with eggs. Pulse 120. The eyes are intelligent, and he seems more composed than yesterday. *Evening.*—Fidgetty and rambling, wants to get out of bed.

Feb. 15th. *Morning.*—About the 13th day of the fever. Pulse 120, free from sweating, skin simply moist, tongue dry in the centre, expression more intelligent, and answers questions addressed to him, though often incorrectly. During the night had been rambling and restless, but dropped off to sleep, this and the previous night, at 4 A.M., sleeping till daylight. [At this point undoubtedly the crisis of the fever took place, but convalescence was interrupted by a latent pneumonia].

Feb. 16th. *Morning.*—14th day of fever. Expression quite bright, and answers questions intelligently. Pulse 108. Had less stimulants during the night, which was quiet and restful; obtaining proper sleep from 3 A.M. After taking a small dose of brandy and egg-flip he brought up a round worm some 5 inches long. Tongue covered with viscid mucus. *Evening.*—Some exacerbation of the fever and delirium.

Feb. 17th. Intelligent, but does not articulate well from the dryness of the mouth and tongue. Pulse small, 120. Fidgetty and restless in the night time with a remarkable degree of jactitation of the muscles of the arms and hands, resembling the involuntary movements in choreic cases. Yesterday bowels moved three times, to-day only once. *Evening.*—Though there is a certain subsidence of the pulse and

abatement of the heat, the delirium and fidgettiness is rather more marked, the jactitation of the arms and hands being so great that the pulse can with difficulty be felt at the wrist. He is subject to hallucinations which alarm him greatly. The heart's first sound seems muffled and weak, but the bronchial symptoms are relieved. Again in the evening I found him bathed in perspiration which appears to have made the pulse somewhat fuller and slower. To have a draught of 20 drops of solution of morphia with 20 drops of chloric ether.

Feb. 18th. Patient fell into a sound sleep 2 hours after taking the draught, and slept till morning, with one or two interruptions, when he asked for something to drink. Told me that last night he had his first proper sleep for a week or more, and that he has not been in his right senses for some days.

Feb. 19th. Draught procured him a good night's rest. Pulse 120; much less subsultus. *Evening.*—Full perspiration, and skin covered with sudamina. Quinine ordered.

Feb. 20th. Pulse 116. Teeth covered with sordes, tongue dry and furred in the centre. He is fretful and apt to cry; by no means in full possession of his faculties, and winces on touching any part of the abdomen. No signs of marked engorgement of liver or spleen. A fresh crop of sudamina has appeared on the groins and abdomen. At 2 P.M. face suffused with a bright scarlet blush, and though there is hardly any cough yet he brings up from time to time a few sputa of frothy viscid mucus. This, together with his retarded convalescence and full quick pulse (108), seemed to point to the existence of a masked pneumonia or broncho-pneumonia. Accordingly on percussing the chest I found that there was deficient resonance in the middle of the right back, where there was also marked deficiency of respiratory murmur. Higher up rhonchus, sibilus and mucous clicks were heard. A pint and a half of clear urine was draw off by catheter and tested. Temperature 90°, sp. gr. 1030, suspending a fine mucous cloud, highly acid reaction, free from albumen, rich in chlorides. The abundance of chlorides I took as an indication that this latent pneumonia was already in process of resolution. Nevertheless I prescribed an antimonial mixture with sinapisms, and apparently with the greatest advantage to the patient.

Feb. 21st. Pulse down to 100. Nervous agitation and crying together with subsultus altogether ceased. Tongue and teeth free from sordes. Percussion of right back decidedly dull, and respiratory murmur deficient; crepitant and mucous râles distinctly audible, and vocal fremitus increased. Some sudamina still visible; the mulberry rash with petechiæ gradually fading.

Feb. 22nd. Again had profuse night sweats which leave him feeble and exhausted. Pulse 100. To intermit the antimonial and take quinine with nitromuriatic acid. At 2 P.M. face and body bathed in perspiration, but pulse only 98 and temperature under tongue 98°. More sudamina visible. At 8 P.M. skin moist, pallid and cool; pulse about 90. Continues to take nourishment and wine well.

Feb. 23rd. Pulse about 80. More sudamina. Passed a good night after taking a sedative draught.

Feb. 24th. 8th day of the pneumonia and 21st of the fever. Slept soundly through the night without the use of morphia and without once wakening his attendant. Still very weak, and more sudamina visible. Pulse 80. Percussion in right back tympanitic or wooden. Moist crepitus abundant, and air enters the affected portion of lung freely. The pneumonic engorgement is in fact resolving fast. Urine of a dark straw colour, sp. gr. 1020, full of chlorides.

Feb. 25th. Slept soundly without either morphia or brandy. Pulse 80. No fresh sudamina. Body much emaciated, but percussion of right back good, almost natural, though there is still a little crepitus redux audible through the stethoscope. No sputa, no cough, chlorides abundant in urine, of which the sp. gr. is 1015. Heat under tongue 95°.

Feb. 26th. Pulse 80. Tongue moist and cleaning rapidly; slept well and takes food well; no sweating, no sudamina.

Feb. 28th. Able to sit up in bed and to eat animal food.

March 13th. The patient's convalescence on the whole has been remarkably slow. He continues haggard, thin and weak, with a singularly excitable quick pulse, ranging from 100 to 120. When he first enters the room it numbers 120, but after sitting down it falls to 96. Another day it was 96 on entering and fell to 84. But that his appetite keeps up and that he is free from cough I should suspect the

deposition of miliary tubercle in the lungs. He was ordered cod liver oil and port wine, with abundance of out-door exercise.

March 22nd. Patient at length begins to feel decidedly stronger, and at the end of the 6th week was able to join his ship, though to the last the excitable character of the pulse was maintained.

April 24th. Health completely restored.

II.—The case of W. B., also under treatment at the same time, from the the gunboat *Dove*, was one of mild continued fever without rash, which got well within a fortnight, and calls for no particular remark. There were no other cases of fever among the crew, and how these occurred is an absolute mystery, seeing that the sanitary condition of the gunboat was excellent, and neither typhus nor continued fever in any form was known to exist amongst either foreigners or natives at this port before, then or since.

These cases, eminently suggestive as they are, cannot be passed over without some comment.

1°. There can hardly be a doubt that these—the first more markedly—were cases of mild typhus. To the question whence derived I am unable to make any answer. If ever typhus originates *de novo* it did in these cases. And yet the mystery after all lies probably in some concealed fomites attached to old clothes or flannels locked up in one of the seamen's chests, and thus the contagion may have been imported from London and did not after all originate here.

2°. It is one of the most remarkable facts in the natural history of fever, that though the sensational and volitional functions of the nervous system are in a state of abeyance, the digestive system continues throughout in a state of the highest vigour and efficiency. The conclusion is irresistible that while the cerebro-spinal system is overpowered by the action of the fever poison, the sympathetic system which presides over the organic, involuntary and, so to speak vegetative functions of life, is merely stimulated by the same action. It would be more correct to say that the primary effect of the fever poison is irritant or excitant to the vaso-motor nerves (derived from the sympathetic) whence the constriction of the whole arterial tree with its terminal arterioles, evinced by rigors, chills and loss of temperature, the mass of the blood being thrown inwards upon the heart, spleen, liver and venous system. This is the first stage of the disease. This primary irritant and contractile state, of possibly a week's duration in typhus, of but a few hours duration in intermittents and remittents, though in these last often repeated, is succeeded by a state of paralysis of the functions of the vaso-motor nerves. Their controlling power over the arterial system being thus lost, the calibre of the blood vessels enlarges, and the now excited heart labours violently to propel the embayed and heated blood through the unnaturally patent channels of the relaxed arterial and capillary systems.

The experimental investigations of Claude Bernard, Brown-Sequard and a host of German inquirers have shown that section of the sympathetic nerves of a part at once induces paralysis of the vaso-motor nerves, which deprives the blood vessels of their inhibitory or controlling power. These consequently dilate, increased vascular excitement, heat and sweating being the results. I have observed in my own case (febricula) that after the febrile orgasm had passed and the actual excitement of the circulation was over, there still remained a degree of fullness, tension and throbbing of the arteries, showing that the proper inhibitory nervous influence was not yet recovered. The occasional utter prostration and tendency to syncope in cases of remittent fever is thus easily explained by the dilated state and want of tone of the arteries, yet this paralysis of the vaso-motor nerves is perfectly consistent with full secretory activity of the various organs, whence the flow of gastric, pancreatic, biliary, intestinal and urinary secretions is unimpeded. The functions of animal life, in a word, are maintained though those of the sensory, intellectual and volitional are in a state of abeyance. Dr. Stokes of Dublin indeed maintains that the assimilative process in fever is more active than in health.

3°. Our improved acquaintaince with the physiological condition of fever patients therefore fully warrants the admirable axiom of Dr. Stokes—"support the strength and watch the local effects." The most marked distaste for food and the highest state of delirium do not justify the withholding of nourishment in every available form. We cannot cut short the fever but we sustain life until the disease has run its natural course. The necessity of feeding fever patients by night was well illustrated in the above case (I.)

4°. The wonderful tolerance of alcohol during the height of the disorder. All cases, however, are not alike, and in B.'s case, unmarked by depression and exhaustion, no stimulants whatever were given.

5°. May not the profuse sweating in this case explain the absence of high delirium?

6°. After the crisis of the disorder the patient went to sleep regularly between the hours of 4 and 6 A.M. I have frequently made the same observation in similar cases. The truth is, as has been shown by Professor LAYCOCK of Edinburgh, that this is the period in the 24 hours of least barometric pressure and the minimum degree of heat and electric tension. Then, too, the vital actions of the human body sink to their lowest, the respiratory movements, activity of the circulation and consumption of oxygen being all reduced to a minimum, and this natural subsidence of the respiration and circulation favours sleep. Professor LAYCOCK and Mr. HAVILAND of the Bridgewater infirmary have also shown from a large collection of statistics that the chances are 3 to 2 that death will occur at the period named. The whole subject (periodicity in disease) is worthy of more thorough investigation than it has ever yet received.

7°. The supervention of pneumonia, without cough, pain or rusty sputa, in fact wholly without the patient's consciousness, shows the necessity for exercising vigilance over the pulmonary organs in all typhus cases. It was highly interesting to observe the complete resolution of the disease within a period of 8 days.

8°. The singularly excitable nature of the pulse during convalescence—a condition of the circulation not unfrequently remarked as a sequel to febrile disorders in the East—I attribute to a certain hypersensitiveness of constitution or increased mobility of nerve-force induced by longer or shorter residence in an enervating subtropical climate like this.

III.—*Temporary Loss of Vision in Right Eye with fixed muscæ, insomnia and incipient symptoms of Angina Pectoris in connexion with Simple Cardiac Hypertrophy.*—The patient, a stout rosy-gilled man aged 38, came to me on the 11th of February last, complaining of sudden loss of vision in the right eye, of 12 days standing. He had been down river on Customs duty, and one bright day on taking up his glass to spy some native craft which were bearing down upon him, he found the sight strangely obscured in his right eye, objects being visible but, as it were, dyed black. He does not suffer from headache, nor is there any pain or congestion of the eye, and the pupil, which is moderately open, contracts naturally like that of the sound eye. He tells me that 15 years ago he had a bad attack of yellow fever with high delirium, during which he was blind for 5 days, and that 5 years ago he suffered badly from palpitation, the throbbing of the heart being visible, and accompanied with much uneasiness. At this period he was a heavy smoker and accustomed to the use of strong spirituous liquors. He got better of this attack within a month, but ever since has been conscious of something wrong with his heart though there is seldom any palpitation, uneasiness or dyspnœa, except when he is excited, over indulges in smoking, or over exerts his strength. He has also been extremely nervous ever since. Wakes often in the night with a wrenching sensation at the heart, as if it were twisting or contracting violently upon itself. This sensation, which he describes as rather alarming, obliges him instantly to sit up in bed cross-armed for relief. Every winter for 2 or 3 years past he has been subject to slight asthmatic and bronchial attacks with a hoarse clanging cough and occasional expectoration of coloured sputa.

He is at present suffering from a cold, a certain thickness of breathing, and dyspepsia with wakefulness at night. He is of a fleshy, plethoric habit, with considerable abdominal fullness, but without either hepatic or splenic enlargement. There is marked engorgement of the capillary vessels of the cheeks. Urine normal. Pulse full and strong, 80 to 90. The chest is well developed, and expands freely in respiration. Area of cardiac dulness much increased. Heart's sounds at the apex not very clear or distinct; second sound unduly loud at mid-sternum and under manubrium. There is strong pulsation in the carotids and visible lifting of the tissues at each pulsation. Such were the results of a physical examination of the chest, yet what chiefly distressed the patient was not anything the matter with his heart or lungs but only the loss of vision in the right eye and the persistent sleeplessness. The connexion however of these subjective symptoms with the state of the heart at once impressed itself upon my mind.

In walking he seems to be going down an inclined plane, and on entering a room inclines his head to the affected side, and by leering sideways obtains a partial view of objects. A dark disc, the size of a crown

piece, seems interposed between him and every object he looks at with the right eye; it has been equally large, black and stationary from the first. The pupil is perfectly contractile and readily dilates under the use of atropine, and the transparent media of the eye are perfect. The disc is not so dense as absolutely to blot out the view of objects, but these are barely visible, draped as it were in black, hence I should speak of the affection as an example of fixed muscæ dependent upon a congested state of the vessels in the retina, and that again upon an hypertrophic heart. The case is a rare one and interesting in several respects.

As there was a certain yellowness of the conjunctivæ with constipation, dyspeptic symptoms and other indications of bilious derangement, I put the patient on a course of blue pill and colocynth with vegetable bitters and nitromuriatic acid. Within 3 days he reported a very slight diminution in the density of the disc, though he still could not see to read, and a volume in his hand seemed very greatly reduced in size. Atropine has the effect of minimizing objects or making them seem more distant, but does not improve the vision. On the 4th day the bronchial symptoms were much relieved by special treatment, and on the 5th the action of the pills was hastened by a purgative dose of Epsom salts, after which he reported a still further thinning away of the cloud, so much so that he could read the large gilt letters on the backs of books. On the 7th and 8th days he reported the cloud or spectrum to have diminished to the size of a sixpence, but for more than a week past he had been all but sleepless, never obtaining more than an hour or an hour and a half of sleep any night, though he sometimes had a short nap in the daytime. Laudanum in doses of 30 or 40 drops was tried and found quite inefficacious in inducing sleep. Bromide of potassium alone and with tincture of cannabis indica was found equally inefficacious. Iodide of potassium with tincture of digitalis answered well for a time, but on the whole the best and only reliable sedative was found to be the hydrate of chloral in half drachm to drachm doses. Pulse steadily beating at the rate of 90, 84, 80. The large doses of iodide of potassium induced iodism and excessive flux of clear fluid from the Schneiderian membrane to the amount of a pint, with much sneezing. Ordered to paint iodine liniment over the præcordium and to take tincture of aconite in 5 drop doses daily, as recommended by WALSHE in cases of hypertrophy and disquietude of the heart.

He wakens occasionally in the night with a feeling of tightness or constriction in the epigastrium which is relieved by bending over towards the left side and squeezing himself together. At such times he is much troubled with flatulence, but on getting up the uneasy feeling at once leaves him. On making a further examination of the chest the evidence of cardiac hypertrophy is found to be quite conclusive, notwithstanding the general absence of acute symptoms of heart disease. This is accounted for by the nature of the enlargement, which is simple, uniform and affecting equally both sides of the heart. There being neither obstructive nor regurgitant murmur one may conclude that the valves are sound. The enlargement of the left side of the heart is inferred from the fact that the position of the apex is ascertained to be 3 inches below and to the outside of the nipple. Enlargement of the right by the square form of the dulness which extends right underneath the ensiform cartilage. The first sound is dull and muffled, the second accentuated along the whole length of the sternum. Clanging cough; pulsating carotids; pulse full, 80. It is remarkable that after 8 or 9 hours of refreshing sleep, after taking the chloral or any other sedative, the pulse rises to 84 or even 90. The chloral does not constipate. At the expiry of 6 weeks the patient wrote me that the pain in the præcordium had quite gone, that his eyesight was completely restored, that he could sleep at night without having recourse to sedatives, and, in short, that he felt himself for the present quite well.

IV.—*Opium Poisoning.—Two cases saved by the use of Strychnia; one fatal, within a period of 6 or 7 hours, brought to the surgery dead.*—The first was the case of a young man, aged 28, in the habit of smoking a mace of prepared opium daily. On account of a family quarrel he swallowed, on February 22nd, at 10 A.M., half a tael weight of native crude opium, equal to 6 drachms avoirdupois. He was brought to the surgery at 1.30 P.M., 3½ hours after taking the drug, half walking, half carried between two men who supported him on either side. The eyelids were somewhat swollen, and the pupils much contracted, tongue moist with a fine white fur, pulse considerably quickened—100 or more, hands hot, and general surface cold, but the patient was still perfectly conscious. This preservation of intelligence at an interval of 3½ hours after taking so large a dose of opium is to be attributed to the facts that he had vomited once a quantity of black

water which doubtless contained some portion of the opium, and that habit had rendered him more or less proof against the narcotic action of the drug. Opium, it is well known, is primarily stimulant to the heart and circulation, as also probably to some portion of the sensorium, and he had not got beyond this stage when he arrived at the surgery. I immediately administered emetics of sulphate of zinc, but failing to induce vomiting I used the stomach pump, by which time the whole of the drug would appear to have passed out of the stomach, since the fluid withdrawn had not the slightest odour of opium. Strong coffee was now given the patient to drink ad libitum, and he was kept walking about between two coolies. Though sorely tempted to try the counteractive influence of belladonna or the more recent method of treatment by strychnia (*vide* MAVOR'S Experiments on Animals with Strychnia and Morphine,—*Lancet* for December 9th, 1871, and successful cases where morphia proved antidotal to poisonous doses of strychnia,—*Lancet* for December 23rd, 1871, and January 13th, 1872) I withheld everything but strong hot coffee and cold water, for which he craved as an intolerable thirst had set in. I wished if possible to leave the case to the vis medicatrix naturæ, but finding by 3 P.M. that he was getting more and more deeply under the influence of the drug, the pulse failing, being already under 90, the surface more and more chill, and the man almost falling asleep on his legs, while the pupils were contracted to a point, I administered $\frac{1}{8}$th of a grain of strychnia in solution as a draught, and within half an hour a second dose. He vomited freely after this and brought up some sedimentary stuff which may have been crude opium. At 4 P.M. I give him a third dose of the strychnia solution, the tongue being now coated with a thick brown fur as in convalescents from typhus. One effect of the strychnia seemed to be to impart tone to the stomach and so stimulate it to reject its contents. At 5 P.M. I gave a fourth dose. At 8 P.M. the pupils were still contracted but were slightly responsive to the stimulus of light; skin warmer; less drowsy, can talk quite intelligently. At 10 P.M., sitting up in bed with a pulse almost natural, in a kind of reverie but not asleep. Passed the night in this state and position. Walked home at an early hour next morning quite well.

I think if any one will take the trouble of comparing the rapid and thoroughly satisfactory recovery in this case, where a much larger dose was taken (6 mace against 4), with a case of spontaneous recovery recorded by me in the last number of these Reports, page 63, where recovery was delayed over a period of several days, and embarrassed by a dangerous attack of congestive bronchitis, he will come to the same conclusion with me, namely that strychnia is a true and perfectly reliable antidote to opium. As far as I know these are the first cases illustrative of this important fact as applied to the human subject.

V.—The second case was that of a young married woman, not an opium smoker, aged 21, who having quarrelled with her husband, swallowed 3 mace of crude opium on the evening of April 18th at 6 P.M. She was brought at 7 P.M. very pale and exsanguine, with contracted pupils and a strong inclination to sleep. Mustard emetics were administered, followed by strong coffee and enforced exercise. The vomited matter was free from any opium smell. I was strongly tempted in this case also, knowing how large a quantity of the crude drug it takes to kill in the case of Chinese, to trust to the mere effects of stimulation of the organs of sense and to the powers of the constitution. But at 9½ P.M. a change for the worse took place. There was marked sinking of the pulse, with cold sweats and ghastly pallor of the countenance. I thereupon gave $\frac{1}{8}$th of a grain of strychnia; a second dose at 10 P.M. and a third at 11 P.M. By 11.15 P.M. the pulse had recovered tone and the skin warmth, the cold perspirations ceased and the patient seemed much brighter and more intelligent. The good effect of the remedy was apparent within about an hour and a half, and was sufficiently marked to seem striking. There was still some slowness in the mental operations, and she tottered from side to side like one drunk when asked to get up and walk. By midnight, however, she was able to walk unaided across the floor, and the contraction of the pupils was beginning slowly to give way when I sent her home in a chair. She was reported to have slept till daylight, but not during the day, and, excepting for a painful dyspeptic feeling, to be not much the worse next day.

VI.—The third case was that of a man aged 38, an opium smoker who, having been sharply reproved by his father for the practice, swallowed a fatal dose of the prepared extract in order to spite his father. He had been drinking samshoo during the evening, and after swallowing 4 mace of the prepared extract

continued his potations, the certain effect of which must have been to present the poison to the absorbent system in a much more soluble form than if it had been merely suspended and partially dissolved in water. He took the drug at midnight, yet with the usual apathy and stupidity which characterises the Chinese in matters of life and death, the relatives delayed informing me of the circumstance till the following morning. When they brought him to the surgery at 7 A.M. he was stark and stiff, the pupils moderately dilated, and the tongue covered with a dry fur. In vain they asked me now with some show of earnestness to call him back to life. I told them the best thing to do was to procure him a coffin, at which they shouldered the corpse and, chuckling and laughing at the sudden contrast of ideas, carried him away.

VII.—*Measly Pork.*—On March the 16th I was called to see some half dozen members of the foreign community who had inadvertently eaten a quantity of measly pork chops cut from an English pig. The quality and flavour of the article were so unanimously pronounced excellent that a fresh supply was called for, and the leg or ham was cut into, when the party discovered their mistake, the muscular substance throughout being thickly sprinkled with cysticerci like so many sago-grains. The majority of these were white and firm, little nodules of coagulated albumen with membranous sacs and circlets of hooks attached, but some which had been exposed to a minor degree of heat were in a much fresher and more transparent state. In the case of the former which had been subjected to a heat of not less than 200° to 300° the vitality was doubtless completely destroyed so as to render the germ incapable of further development, but this may be doubted as regards the latter. To render assurance doubly sure and prevent the possibility of such an occurrence within the human economy, notice to quit was immediately served upon the new tenants with peremptory and decidedly operative effect. The "cysticercus" or "measle" in pork is well known to be the hydatiform or larval condition of the tænia solium.

VIII.—*Treatment of Burns with a strong solution of Nitrate of Silver.*—Having for a long time been disappointed by the recognised treatment of burns by means of carron oil and cotton wool, and acting upon a suggestion of Mr. F. C. SKEY of St. Bartholomew's Hospital, I adopted the above plan in the case of an infant aged 6 months, who lately suffered from an extensive burn of the hip and side. The child was brought to me on the third day in great pain with extensive grey and yellow sloughs of dead skin on the broken surface. The sloughs being removed I first applied a strong solution of nitrate of silver (20 grains to the ounce) by means of a camel's hair pencil, and then a piece of lint soaked in a weaker solution (4 grains to the ounce), covering it with oiled silk and applying some cotton wool and a bandage. The child was brought back in a week with the sore half healed, the dressing having been changed daily in the meantime. I again painted the surface with the strong caustic solution in which a little carbolic acid had been dissolved, and wrapped it up as before. Within a fortnight the entire raw surface was cicatrised over. I contend that this plan has several advantages over any other:—

1°. It affords the greatest amount of relief from pain by the formation of an albuminous coagulum upon the surface, which protects the nerves and tender granulations from the action of the air or external pressure.

2°. It ensures the most rapid and expeditious cure. Under the old method the case in question must have been a month at least under treatment, and have gone through much more suffering. The nature of the accident is such as to weaken the vitality of the part and induce subsequent weak action, conditions which are much better combated by the stimulant than by the emollient method, while the antiseptic nature of the remedy used prevents the unwholesome discharge from the decaying sloughs injuring the granulating surface.

IX.—XII.—*Cases of Spasmodic and Organic Asthma.*—1. Case of spasmodic asthma followed by urticaria and intermittent fever. Patient has been subject to attacks of spasmodic asthma for 12 months, and though quite a young man has acquired the gaunt frame and round shoulders of the asthmatic. He suffers most frequently in the summer season, and contracted the disease by getting chilled while asleep in the open air. The attacks usually last for 3 days; the attack for which I treated him lasted but 30 hours. Sharp catharsis and vomiting were first induced by means of croton oil, and this was followed by doses of lobelia, sulphuric ether and antimonial wine. After recovering from the asthmatic attack he suffered badly

from urticaria, the eruption appearing in great raised patches, with apparent swelling of the whole body, and intolerable heat and itching of the surface. As the swelling and eruption began to subside there came on great irritation of the stomach and tearing pain in that region, with a tendency to reject everything in the shape of food. There was evidently a kind of erythema of the gastric mucous membrane, which however was speedily relieved by a mixture of bismuth with soda and hydrocyanic acid. It would be interesting to consider whether this was an illustration of sympathy between homologous structures, or of a poison circulating in the blood and acting equally upon both the skin and gastric mucous membrane. Finally the patient suffered an attack of intermittent fever, which yielded readily to quinine, after which his convalescence was uninterrupted. By way of fortifying his constitution against the constant recurrence of these asthmatic attacks, he was recommended the use of cod liver oil and the cold douche, and with such advantage that he has not had a single attack of the asthma, or more than a very short-lived one, since that time, a period of nearly 12 months.

2. Case of spasmodic asthma in an opium smoker. This man is subject to a slight degree of bronchorrhœa with thickness of breathing from time to time, and being seized with a paroxysm of spasmodic asthma of great severity betook himself to the opium pipe with a view to relief. This had the effect of aggravating all the symptoms, and he was brought to me in a very alarming state. Aware of the constringent effect of opium upon the capillary vessels, and its power in locking up the bronchial secretions in pulmonic cases where given by itself, I gave the man instantly a potion containing belladonna as an antidote to the opium, combined with antimonial wine and spirit of sulphuric ether. Relief was instantaneous and permanent.

3. Case of aggravated organic asthma, with fully developed emphysema, but without dexiocardia or depression of the heart. The patient, a schoolmaster aged 37, had suffered for a period of 11 years from asthma, with cough and expectoration. The dyspnœa is constant though worse at certain times. He is worn to a skeleton, is capable of but very little exertion and would seem to most persons to pass his existence in a state of profound misery. A physical examination of the chest yielded the following results:—Percussion of right apex, wooden or dull; of left front, tympanitic; respiration, tubular in right front, especially near the border of the sternum, the expiratory murmur being everywhere harsh and prolonged, and exceeding the inspiratory; creaking râle and most imperfect respiratory murmur throughout left front, in the neighbourhood of the heart almost equal to silence; loud tubular breathing audible in lower right back, with coarse crepitus higher up; in left back rhonchus, sibilus and creaking râle. The respiration is almost entirely abdominal, 32, or double the usual number, while the pulse at the wrist is rapid and small, 100, and the extremities are cold and damp. From the emphysematous state of the lungs, the chest is all but immovable and respiration is chiefly accomplished through the action of the diaphragm. The sucking in of the trachea and the action of the scaleni muscles in fixing the upper ribs during inspiration are most marked. The cardiac action is excited, vehement and loud with a harsh mitral bruit at the apex (indicating mitral incompetency) and there is distinct reduplication of the second sound at the base from want of perfect synchronism in the constituent elements of the diastolic sound. There is no engorgement or pulsation of the jugular veins, from which one may safely infer the competency of the pulmonary and tricuspid valves. In the third and fourth intercostal spaces a distinct thrill is perceived by the hand with each cardiac pulsation. This valvular thrill or "purring tremor" has been clearly traced by Dr. WALSHE [*Diseases of the Heart*, 3rd Ed. p. 36] to insufficiency of the mitral valve with dilated hypertrophy of the left ventricle, precisely the conditions existing in this case. Nevertheless there is no displacement of the heart downwards or to the right as is commonly the case in aggravated pulmonary emphysema, which is certainly one of the most extraordinary features of the case. It is in all probability to be accounted for by an old attack of pericarditis which has glued the heart and its sac firmly to the chest-wall by fibrous adhesions so as to prevent the possibility of any displacement by the dilated cells of the encroaching lung.

Some remarks which I had intended to make on chronic fever or febricula, the bugbear of residents in subtropical climates, and also on the operation of skin grafting, I must withhold for another occasion.

L.—Dr. Edward HENDERSON's Memorandum on Steppe Murrain in Shanghai.

MY attention was first directed to disease among horned cattle in Shanghai in the autumn of 1868. At that time many animals stalled within the Municipal limits died, and considerable apprehension was felt lest the public health should suffer from the diseased meat which might find its way into the shops of native butchers. Dr. THIN, in a letter addressed to the *North-China Daily News*, gave the particulars of a visit which he paid to the slaughter-houses in the neighbourhood of the New Cemetery, on the 21st of October in that year. His visit was made with a view to the examination of some diseased beef regarding which he had received special information. The peculiar characters of the meat being fully detailed, Dr. THIN went on to describe the morbid appearances which he noted in the body of a sick cow, slaughtered at his request, when apparently in the first stage of the disease:—

> The heart and lungs were healthy. The stomach was distended with fluid and a quantity of food that had been there for some time. Its internal surface was congested and perfectly black throughout. The outer covering of the intestines was in the first stage of inflammation, that is to say, peritoneal inflammation was setting in.

Dr. THIN further stated that the disease was considered by the natives to be "ma ping" (blood disease,) and that it was recognised by them as of common occurrence at that time. "They (the Chinese) say that "the appetite fails for several days, and then the animal droops and would soon die, but that as soon as the "disease is unmistakeable it is slaughtered for food." It was not at that time specially my duty to investigate such matters, but I nevertheless felt sufficiently interested in them to prosecute the enquiry commenced by Dr. THIN, so far as time and opportunity permitted. On the 4th of December 1868, I published the result of my investigations. I had altogether under observation three animals suffering from the disease, two bulls of the common breed of small native cattle, and a buffalo. Of these three cases two obviously resulted from contagion. The symptoms presented by all three were similar; I quote from my published narrative:—

> 1st, An appearance of great lassitude and increasing weakness, evidenced by listless movements, low carriage of the head, and depression of the ears. 2nd, A staring condition of the coat. 3rd, Refusal to take food, and chewing of the cud discontinued. 4th, An accelerated pulse. 5th, Diarrhœa. 6th, As the disease progressed an uneasy restlessness indicative of pain, probably abdominal, and laboured breathing.

Postmortem examinations were made in each case as soon as possible after death; I give the particulars as they were recorded at the time:—

> The first stomach in all cases was found distended with the food last taken, the process of digestion having been, I suppose, arrested by the onset of the malady. The spleen was somewhat softened in all cases. The gall-bladder was distended in the first two cases with a brownish yellow fluid differing widely from the clear green liquid which ordinarily occupies that viscus; in the third case it contained, but was not distended by, similarly altered bile. The condition of the intestines in the three cases deserves a separate description. In the first, the rectum and lower part of the descending colon had scattered here and there over their internal surface a number of raised points of a dark blue colour about the size of a large pin's head; there was little or no congestion, but the summits of one or two of these points were ulcerated. In the second, precisely similar blue points were present in much greater numbers, again occupying the rectum and descending colon, while the entire extent of the lining membrane of the large bowel was intensely congested, more markedly so in the regions of the cæcum and lower part of rectum. Many of the blue points were the seat of minute ulcerations. In the third, a large water buffalo, the blue points were absent, but intense congestion of the mucous membrane extended up to and included the last stomach, while in some places sloughing had occurred. The brains and spinal cords were not examined. The other organs not named were found to have a natural and healthy appearance.

The last statement made in this record requires correction; not suspecting the existence of Steppe Murrain in Shanghai, I omitted in these postmortems to examine the mucous surface of the nostrils and windpipe.

Before the beginning of 1869 the disease seemed to have entirely disappeared from Shanghai and its neighbourhood; and although I am now informed that it has been of yearly occurrence since, the first fresh cases which I myself saw were brought under my notice in March of the present year. My informants who assert the regularity of its return are not able to confirm their statements by records of examinations after death, but I am assured by them that a form of disease presenting precisely similar symptoms to those which I have now daily opportunity of observing, occurs annually in Shanghai, extends variably, and has proved in past years as now almost certainly fatal to all the animals which it has attacked.

On the 25th of March 1872, Mr. KEELE, Municipal Market Inspector and Dairyman, informed me that disease had broken out among his cattle, and that from the symptoms and the rapid failure of strength exhibited by the animals attacked, he feared he was likely to lose a large number. Already two had died. He was anxious to know whether the disease was contagious, and whether anything could be done in the way of treatment. He had separated those already affected from the rest of his stock. On the morning of the 26th I visited the paddock in which the sick cattle were confined, and saw there some 12 or 15 animals in various stages of what appeared to be a malignant specific fever.

Mr. KEELE's stock consisted on the 14th of March, of 38 head of cattle, viz.: 17 cows, 14 heifers, 2 calves, 2 bulls, and 3 buffaloes. The following tabular statement gives, without reference to pathology, some of the main features of the epidemic as it affected those animals, shewing a sequence of events which I am anxious to lay clearly before my readers, but which I find difficult to arrange distinctly in a continuous narrative :—

DESCRIPTION OF ANIMAL.	DATE OF SICKENING.	DATE OF DEATH.	REMARKS.
1. French Heifer ex *Hoogly*, *	March 13th	March 18th	
2. do. do. *Provence*,	„ 19th	„ 24th	
3. do. do. *Alphée*,	„ 20th	„ 26th	
4. do. do. *Donnai*,	„ 23rd	„ 26th	
5. English Cow,	„ 23rd	„ 28th	
6. Australian Cow,	„ 23rd	„ 28th	
7. Calf,	„ 23rd	„ 27th	3 months old. Killed.
8. do.,	„ 23rd	„ 24th	6 or 7 weeks old. Killed.
9. Shanghai Heifer,	„ 24th	„ 27th	
10. do. do.,	„ 24th	„ 26th	
11. do. Bull,	„ 24th	„ 26th	
12. Buffalo,	„ 24th	„ 27th	
13. do.,	„ 24th	„ 27th	
14. Australian Cow,	„ 24th	„ 28th	
15. French Heifer ex *Hoogly*,	„ 24th	„ 27th	Killed.
16. Calf,	„ 24th	„ 24th	1 month old. Killed.
17. Shanghai Heifer Calf,	„ 24th	„ 26th	6 or 7 months old.
18. French Heifer ex *Meikong*,	„ 26th	„ 27th	Killed.
19. Australian Cow,	„ 26th	„ 28th	
20. English Bull,	„ 26th	—	Recovered.
21. French Heifer ex *Alphée*,	„ 28th	April 1st	
22. Australian Cow,	„ 28th	„ 3rd	
23. Shanghai Cow,	„ 28th	„ 4th	
24. Australian Cow,	„ 29th	„ 4th	
25. Shanghai Cow,	„ 31st	„ 2nd	
26. do. do.,	„ 31st	„ 4th	

On the 1st of April Mr. KEELE removed the 13 animals which the disease had spared, to sheds situated at a distance from their old quarters, and by this precaution fortunately succeeded in preserving a remnant of his stock. Of all the 26 animals attacked, but one, an old English bull, recovered; the 5 killed were all evidently hopelessly sick.

* These are the names of the vessels from which Mr. KEELE obtained the animals in Shanghai. It will be seen that they all belong to the French mail service, hence the common but erroneous impression that the disease was introduced from France.

Among the sick cattle visited on the morning of the 26th March the following symptoms specially attracted my attention. Pyrexia, indicated by a quickened pulse, and by the eagerness with which those animals in what appeared to be the earlier stages of the disease sought to cool their bodies in a pond which occupied the centre of the paddock; cessation of rumination, not confined to those apparently most seriously affected; depression of vital energy, shewn by low carriage of the head, drooping of the ears, coldness of the extremities, and the indifference with which the greater number regarded the approach of strangers; a profuse watery quasi-dysenteric discharge from the bowels in what appeared to be an advanced stage of the disease; a muco-purulent, in some cases blood-stained, discharge from the nostrils; a watery discharge from the eyes and mouth; in a few a restlessness indicating pain, probably abdominal. In effect I then observed all the principal symptoms which distinguish that particular form of Murrain commonly denominated Rinderpest, and indeed only required the evidence furnished by the bodies after death to render the diagnosis complete. This evidence was not immediately forthcoming however, for, although 3 of the 15 animals visited by me on the morning of the 26th were dead by the afternoon of the same day, the hurried and incomplete postmortem examinations which I then witnessed, in which the lungs and intestines were alone examined, left me still undecided as to the exact nature of the disease. Two of the three seemed to have died without a struggle, their attitudes indicating natural sleep rather than death; in the third the limbs appeared to have been slightly convulsed. One, a cow, was within a few weeks of calving, she had not miscarried. The lungs and pleuræ were free from inflammation in all three. I noted, when the abdominal cavity was opened, an appearance as of commencing peritonitis. There were marked congestion of the mucous lining of the intestines, and a viscid muco-purulent secretion adherent to its surface, with blood extravasations in the sub mucous tissue. I observed also superficial ulceration in the neighbourhood of some of the solitary glands, the situation of which was indicated by a congested circle of mucous membrane —a raised blue or purple spot.

During the week which followed I had ample opportunities for extending and verifying my observations. Of the postmortem examinations made among Mr. KEELE's cattle, at which I assisted, I select one as a fair example of many. I quote almost verbatim from the original record:—

An Australian milch cow, marked No. 22 in Table. First refused to feed on Friday, March 29th; died on Wednesday, April 3rd, the fifth day. Secretion of milk markedly diminished from the first. Before her seizure she yielded some twelve bottles a day, but on Monday, the third day of her illness, only three quarters of a bottle could be obtained, and that with difficulty. Mr. KEELE tells me that there has been no discharge from the nostrils. (See below).

Examination of carcase 4 hours after death. Postmortem rigidity well marked, position indicating some degree of convulsive struggle in death. Cavity of nostrils filled with a thin purulent and very offensive fluid; nearly a pint of this in each nostril. Mucous lining dirty red and leaden coloured; on its surface one or two patches of yellow muco-purulent somewhat adherent exudation or deposit, covering portions of the membrane which appear finely granular—superficial ulceration—denuded of epithelium. Mucous membrane covering epiglottis and arytenoid cartilages deeply injected, dirty red in colour and mottled over with blue points as of blood extravasated somewhat deeply in sub-mucous tissue; more superficial extravasations on free edges of these cartilages. Laryngeal mucous lining similarly altered in colour, blood extravasations in sub-mucous tissue. Much muco-purulent quasi-diphtheritic or croupous exudation situated on patches of superficially ulcerated mucous membrane, most abundant at base of epiglottis and on under surface of vocal cords. Tracheal lining much reddened and the seat of numerous blood extravasations; the tube itself filled with abundant white or pinkish froth. Lungs and pleuræ free from inflammation; from the former much dark venous blood ran out on section—mechanical hyperæmia. The froth noticed as occupying the trachea extended into and occupied the larger divisions of the bronchi. No ulcerations seen on mucous lining of mouth. Tongue covered with scattered raised bright red papillæ, here and there the seat of commencing ulcerations; these were confined to the anterior third. On opening the abdominal cavity the intestines, especially the small gut, appeared pink or reddish and purple as in the first stage of peritonitis, but the glossy smoothness of the membrane was unaltered, and there was no exudation of lymph. The mucous lining was much congested and variously discoloured, generally of a dirty red or purplish colour. Numerous sub-mucous blood extravasations were observed. The surface of the membrane was widely covered with an adherent viscid muco-purulent secretion or deposit. The special glandular lesions noted in so many of the other cases were not observed in this instance. The stomachs were not examined.

While engaged in these investigations among Mr. KEELE's stock, rumours reached me from all sides of the prevalence of the disease among the native cattle in or near Shanghai, and accordingly, feeling it my duty to bring the matter fully before the members of the Council, I published my first official Memorandum on the 3rd of April:—

MEMORANDUM No. 1.

Horned cattle are at present suffering in Shanghai from epidemic disease. One foreign owner has lost during the past ten days 22 cows out of 35, and 2 Buffaloes out of 3. The disease is true Rinderpest or Steppe Murrain. It is highly contagious; rapidly and almost certainly fatal. Treatment appears to be useless, and no reliance can be placed upon any special drugs or combinations of drugs. Affected cattle should be slaughtered at once, and the bodies buried. The flesh of animals suffering from this disease is unfit for food; and milk yielded by sick cows ought not to be drunk.

The symptoms observed in this epidemic are briefly as follow:—

In the first stage of the disease the animal eats badly or altogether refuses to feed; the bowels are usually constipated; the coat stares; the ears droop, and the movements of the body are sluggish. Thirst is not a marked symptom at first. If a milch cow suffers, the milk is markedly diminished in quantity, and soon ceases altogether to be secreted.

In the more advanced stages the animal lies down, breathing hurriedly and laboriously. A thin purulent discharge escapes from the eyes, nose and mouth in greater or less quantity. Thirst is great. A profuse watery dysenteric diarrhœa sets in.

The average duration of the disease, from the onset till the fatal termination, is six days.

The appearances after death are briefly as follow:—

The most marked lesions are found in the respiratory passages. The mucous membrane lining the nostrils and windpipe is dirty red or leaden coloured, exhibiting here and there patches of a yellow muco-purulent deposit adherent to its surface, and covering portions which appear finely granular—denuded of epithelium. These patches of deposit are most abundant in the larynx. The lungs are frequently congested throughout; the divisions of the bronchi filled with an abundant white froth. The intestines were more or less inflamed in every case examined. The mucous lining was congested, and exhibited in some cases appearances similar to those observed in the air passages. The small intestines appear to be chiefly affected.

There is great difficulty in tracing the extension of this disease among cattle owned by natives. Mr. KEELE, the Council's Market Inspector, is actively engaged in making inquiries.

SHANGHAI, *3rd April*, 1872.

Up to the 16th of April my opportunities for observation were limited to the animals attacked in Mr. KEELE's sheds, and, feeling certain that the disease was not confined to his stock, I was surprised that so long a time should have elapsed before other cases from outside came under notice. A strict watch was kept over the sheds of the native cattle dealers, but nothing definite was discovered.

Mr. WARDEN, of Messrs. RUSSELL & Co., kept at this time three milch cows and a calf, stalled on Messrs. RUSSELL & Co.'s premises, but led out daily to pasture in the suburbs. Of one of these cows, Mr. KEELE told me that she was in the habit of coming about his premises, sometimes coming quite inside his compound, and that not many days before his cattle were attacked he had had her driven out of his paddock. Since the disease had first appeared he had seen her and the other cows belonging to Mr. WARDEN feeding on the Old Race Course on part of the pasture where his cows had been. On the 3rd of April I learned that this cow was ill; she died on the 8th with, report said, symptoms similar to those exhibited by Mr. KEELE's cows. On the 16th the calf died, and along with Dr. LITTLE I witnessed a hurried examination of the carcase. We were told by Mr. WARDEN's coachman that the animal had been ill for three days; had been running at the eyes and nose and had had diarrhœa; that the ears had been cold and drooping. The mucous membrane of the nostrils, larynx and trachea was discoloured and congested, the bowels appeared externally as if in the first stage of peritonitis, but were naturally glossy and free from deposit of lymph. The lungs and pleuræ were healthy.

On the 22nd of April the mother of the calf was taken ill, and I visited her in her stall. She had been sick and refusing food for three days. She was very listless and stupid looking. The secretion of milk had almost ceased. The nostrils were discharging although not profusely. There was a little dysenteric purging. Her ears were cold and drooped. Her pulse was quickened. She was removed at my request to a stall in Hongkew and closely watched. She died on the 25th, her life apparently prolonged by the use of porter, several bottles of which were daily poured down her throat. The postmortem examination was made 7½ hours after death, in presence of Drs. JOHNSTON and MACGOWAN. The morbid appearances were peculiarly well marked in this case. Mr. WARDEN's third cow was removed to other quarters, and

escaped the contagion. Evidence now began to accumulate on all sides proving that the disease was not confined to foreign cattle or limited to particular sheds. Referring to my notebook I find the following entries :—

April 10th.—I learn that a cow died on board the P. M. S. S. *New York* between Shanghai and Yokohama. She was shipped in good health on the 26th March and died on the 29th. She was taken from one of Mr. KEELE'S sheds to which the disease had not extended, but in which it subsequently appeared. Along with her stable companions she was carefully separated from the affected cattle. A sheep stalled on board ship in the same pen with this animal died also at sea.

April 24th.—The Larynx and about two inches of the trachea of a buffalo which was being cut up in a knacker's yard was brought to me by the Market Inspector. Mucous lining intensely congested, œdematous, throughout of a bright pink colour save at the attached margin of the vocal cords where it was purple or leaden coloured, in this situation denuded of epithelium and in two points quite destroyed by ulceration. Between the arytenoid cartilages a patch of quasi-diphtheritic exudation or deposit adhering to a surface denuded of epithelium.

May 13th.—Saw larynx of a buffalo killed beyond the Sinza village, it was said in consequence of injuries received from a fall. Mucous lining much congested, a superficial but distinct patch of ulceration at base of epiglottis.

May 21st.—Inspected larynx and part of the great gut of a bullock, one of two said by the owners to have come from Ningpo. Said also to have died on board the boat in which it was conveyed to Shanghai. Laryngeal and tracheal mucous surfaces intensely congested and in patches denuded of epithelium. Much venous congestion of epiglottis. Bowel lining membrane also much congested, the longitudinal folds in the large gut appearing as red lines on the surface of the membrane.

June 12th.—Inspected the windpipe of a bullock taken from a butcher's shop in Passinkew. This is characteristically inflamed, the mucous lining coloured pink and purple and appearing granular.

June 26th.—Larynx and trachea of an animal just slaughtered, brought to me by the Market Inspector. Tracheal mucous membrane streaked red and purple, generally of light vermillion tint, here and there patches of adherent exudation. Laryngeal lining less markedly congested, surface finely granular.

June 27th.—A sick bullock, taken from the same shed in which the windpipe was found on the 26th, was stalled in Hongkew in the morning, and died at one P.M. Postmortem examination 2 hours after death, Drs. JOHNSTON and MACGOWAN present. Mucous lining of nostrils leaden coloured. Laryngeal mucous membrane much congested. Epiglottis much venous congestion. Tracheal lining streaked with red lines, much congested. Lungs and pleuræ healthy. Peritoneal investment of stomach and bowels as in first stage of acute inflammation, without roughening or exudation. Mucous lining of bowel congested throughout, studded here and there with livid spots on mucous membrane marking the situation of solitary glands. Here and there patches of superficial ulceration. I am informed that the dysenteric purging was unusually severe before death ; coldness of the extremities a very prominent symptom.

June 29th.—Visited the cattle sheds and slaughter-houses opposite the Ningpo Joss House with M. CHARRIER, the Market Inspector for the French Concession. There witnessed the postmortem examination of the carcase of a bull dead after 6 days illness. The lungs and pleuræ were healthy. Characteristic appearances were noted on the mucous surfaces, including exudation, discolouration and superficial ulceration. The bowels had, on opening the peritoneal cavity, the usual appearance as of commencing peritonitis. I observed two blue or rather purple raised spots on the surface of the intestinal mucous lining—enlarged glands. At the same visit I was shewn two foreign Shanghai bred milch cows which require some special description; they occupied the same shed:—

A.—A grey cow. Looks listless and ill. Ears drooping. I thought the natural secretion from the nostril increased, but there was no appearance of either pus or blood.

B.—A white cow. Lying down. Ears cold and drooping. Breathing very laborious, the expiration a short grunt. As I watched her she laid her head down and seemed dying. I thought she would scarcely live till morning. I thought the secretion from the nostrils in this case increased.

June 30th.—Visited M. CHARRIER'S stable to which cow *A* had been removed. She was lying down and looking very sick. Ears cold and drooping. Secretion from nostrils increased but simply watery. Breathing laborious, the expiration a grunt. The vaginal mucous membrane inflamed, of a bright red colour, superficially ulcerated and covered with patches of muco-purulent secretion. At this visit I was shewn parts of cow *B* which had died, as was anticipated, on the night of the 29th. The mucous lining of the nostril appeared nearly natural, but there was one patch of about the size of half a dollar leaden coloured and roughened. The laryngeal and tracheal linings were congested, discoloured leaden and purple. The mucous lining of the bowel throughout seemed softened and œdematous, was dirty red in colour and covered with an adherent viscid scanty secretion. It was in this case that for the first and only time I thought I could detect indication of pneumonic mischief; my examination was however very superficial as I did not handle the specimens.

July 1st.—Cow *A* died this morning at M. CHARRIER's stable. Postmortem examination an hour after death, Dr. JOHNSTON present. The characteristic appearances on the mucous surfaces were all well marked, and included congestion, exudation and superficial ulceration. In this case the lesions of the intestinal glands were peculiarly well marked, their cavities were filled with a cheesy looking exudation which protruded from the mouth of the gland on the surface of the mucous membrane. The peculiar appearance as of commencing peritonitis was well marked. The ulceration and congestion of the lining of the fourth stomach were extensive.

July 10th.—Visited with Mr. KEELE a shed in Hupeh Road which contained two bullocks. Three animals were originally stalled there but one had died a day or two before, Mr. KEELE believed, of Rinderpest. One of the two remaining appeared to be ill, he was refusing food, the ears were cold and drooping, discharge from the nostrils natural.*

July 11th.—The sick bullock seen on the 10th is worse. The nostrils discharge much watery mucous tinged with blood. He refuses to eat, the ears are warm but still droop. Pulse 70. Bowels constipated. Drs. JAMIESON and LITTLE visited him with me.

July 12th.—The disease is still progressing in the case of the animal just referred to. Constipation is now exchanged for diarrhœa, the motions, when I visited him, were profuse, very watery and dysenteric. The Chinese owners say he is getting better as he is now able to feed, the truth being that the animal is only sucking the water out of a liquid mash which they have given him.

July 14th.—The bullock died on the night of the 13th. Postmortem examination, at which Drs. JAMIESON and LITTLE were present. The lesions were characteristic and confined to the mucous surfaces. The lungs and pleuræ were healthy.

July 16th.—Shewn to me by Mr. KEELE, the larynx, trachea and a portion of the bowel taken from a bullock slaughtered at Passinkew. Tracheal mucous lining much congested, purple and pink discolouration. Laryngeal lining livid. Purplish discolouration of mucous membrane of bowel. Situation of intestinal glands indicated here and there by raised points of congested membrane. Here and there dark coloured particles adhering to the surface of the membrane, apparently the expelled contents of the solitary glands. I advised Mr. KEELE to seize the carcase from which these specimens were taken, and the case, in consequence of this seizure, was brought before the Supreme Court. The owner of the bullock pleaded that the beef was illegally confiscated, being sound and in good condition, he and his friends affirming, after the usual caution, that the animal was in perfect health when slaughtered. I stated that in my opinion the animal was suffering from Rinderpest when slaughtered, that it was scarcely possible for the cattle dealer to have overlooked the fact of its being unwell, and that the beef taken from the carcase was quite unfit for human consumption.

July 18th.—Visited the cattle shed in the Hupeh Road with Dr. MACKENZIE (P. M. S. S *New York*). The black bull, the companion of the one which died on the night of the 13th instant, is now shewing marked signs of the disease. He was lying down when we visited him, and appeared very dull and listless. Breathing laboured. Profuse watery muco-purulent discharge from the nostrils, and a scanty watery discharge from the eyes. Had been purging a good deal.

July 19th.—Postmortem examination of the black bull some 6 hours after death. Drs. JAMIESON and MACKENZIE present. Appearances on the mucous surfaces characteristic as in the other cases. The diphtheritic or croupous exudation in the larynx and trachea was unusually abundant. Lungs and pleuræ healthy.

July 31st.—Visited a rice mill at Passinkew, separated only by a bamboo fence from the shed in which the bullock was slaughtered on the 16th inst. Saw there a sick bullock which was said to have refused food for three days; the animal is evidently affected with the disease, and cannot live long; the nostrils and eyes are discharging a greenish yellow matter; dysenteric purging is going on; he has ceased ruminating; his ears are cold and drooping, and his head depressed; he is very listless and allows me to handle him freely. There is another bullock in the same shed which is evidently sick, but he is still feeding and ruminating.

August 1st.—The first bullock seen yesterday died this morning at 6 o'clock. The body was opened in my presence at half-past nine. All the characterstic signs of Cattle Plague were found. The ulceration of the mouth and

* The following paragraph appeared in the *North-China Daily News* of August 2nd:—

"A case now being prosecuted at the Mixed Court shows that Rinderpest is not the only danger to which cattle are "liable. Two coolies, in the employ of a mill-owner who uses bullock power to drive his mills, are charged with causing the "death of four of the animals by forcing them to eat broken nails in beancake. Spite prompted the outrage, the master having "had occasion to reprimand the men. The cause of death was discovered by examining the animals after death."

The coolies admitted the offence and were punished accordingly. The owner was asked privately to state the symptoms of illness which he observed among his bullocks, and gave the following:—The animals ate at first a little grass, but afterwards refused all food; at first they made little dung, but afterwards passed watery motions mixed with blood; their ears drooped as the illness progressed; they died on the fifth day. A native butcher examined the carcases and discovered the cause of death. The mill in which this occurred is situated in the immediate neighbourhood of the shed in the Hupeh Road where the three animals referred to in my diary on the 10th of July were stalled.

the lesions of the fourth stomach were unusually well marked and extensive. All the mucous surfaces in the body were affected. There was the usual appearance as of commencing peritonitis.

August 3rd.—Visited the cattle sheds at Passinkew. The second bullock belonging to the rice mill, and noted on July 30th as shewing signs of illness, is now very sick, he has not eaten for three days, his eyes and nostrils are discharging a green purulent mucus, his ears are cold and drooping, dysenteric purging has commenced. A large number of fine bullocks have just been driven in from the country, and are waiting in a dealer's yard to be bought up by the butchers; there are three among these which appear to be out of health, certainly none of the three should be slaughtered in their present condition.

August 4th.—The sick bullock seen on the 3rd inst. died this afternoon. I was not able to be present at the examination of the carcase. The usual signs of catarrhal inflammation of the mucous surfaces were observed.

I do not wish the reader to believe that in these extracts from my notebook he has before him all the evidence upon which I based my opinion of the extensive prevalence of the disease. Many other proofs of this came directly or indirectly to my knowledge, but were not specially recorded, either because they possessed no particular interest, or because my time was otherwise occupied, and leisure for note taking was wanting.

On the 3rd of July I published my second official Memorandum, being fully convinced that the prevalence of the disease must seriously affect the quality of beef sold by native butchers:—

MEMORANDUM No. 2.

The disease which made its appearance in April last among horned cattle in Shanghai, has as yet received no decided check. It is, at the present date, prevalent in the sheds where the animals intended for the Shanghai foreign market are stalled. During the past two months I have had ample opportunities of verifying and extending the observations, as to symptoms and postmortem appearances, which I recorded briefly in my first Memorandum. I am aware that a general impression exists that the disease was introduced from abroad, and probably through cattle imported from France. In this I do not concur, believing that further research will demonstrate the important fact that Rinderpest has been for many years past as truly endemic in the Great Plain of China as in the Steppes of Russia. Medical testimony varies as to the presence or absence of danger to man, arising from the consumption of the flesh of animals slaughtered while suffering from this disease. But it is at least certain that, while no one would knowingly eat such meat, the foreign community generally will require the governing body to use all possible diligence to prevent its introduction into the public markets. The experience of the past three months has convinced me that it is practically impossible to distinguish the beef taken from the carcases of diseased animals from that furnished by those in perfect health, and this appears to be true even in the case of cattle slaughtered in an advanced stage of this particular form of Murrain. It is, therefore, my duty to recommend that, in future, all cattle the flesh of which is intended for the use of foreigners, should be carefully inspected and pronounced free from disease before being slaughtered.

As adding to or modifying the statements made in my first Memorandum, I am anxious to place the following facts on record :—

The period of incubation of the poison is probably under 10 days. The average duration of the disease, from the date of manifest infection to the time of death, is probably not more than 4 days. Running at the eyes and nose, so generally observed in the epidemic which visited England in 1865, has not been a specially prominent symptom among the cattle dying in Shanghai. Many animals have exhibited this discharge in a marked degree, but in others it has been entirely absent.* It is probable that, in every different epidemic, some specially distinguishing feature will be found among the symptoms or postmortem appearances, and climate will of course modify these different manifestations. *A priori*, one would expect that, in a disease which affects all the mucous surfaces of the body, the respiratory passages would suffer most severely in England, and the intestinal canal in Shanghai, and as a consequence, that discharge from the nostrils should be a marked feature in the first case, and diarrhœa or dysentery in the second. The special lesions of the mucous lining of the nostrils of which this discharge is symptomatic, have been found in a more or less marked degree in all the completed postmortem examinations at which I have assisted. I have not observed redness between the toes, with scaling of the epithelium.

All the postmortem appearances which are recognised by the best authorities as specially characteristic of Steppe Murrain, have been observed among the cattle at present dying in Shanghai; and I have on a recent occasion been able to demonstrate the greater number of these to the members of the Council.

* * * *

SHANGHAI, *July 1st*, 1872.

[As these morbid changes are fully discussed in the general summary, I have thought it unnecessary to reprint the concluding paragraphs of the Memorandum].

* In all the cases seen after this date, discharge from the eyes and nose was a marked symptom.

General Summary.—Not the least marked feature of this particular epidemic has been the high death-rate. With the single exception of an old Ayrshire bull, marked No. 20 in the table on page 67, I have not seen a single animal recover; those of Mr. Keele's stock which were slaughtered were all, as already stated, hopelessly sick. All plans of treatment failed signally, but possibly the use of stimulants delayed the fatal termination in one case. It was held by many as a strong argument against the supposed specific character of the disease, that it extended less widely and shewed in a less marked degree its contagious character than during the European epidemic of 1865; while the fact that it did not affect a herd stalled in sheds in the neighbourhood of those occupied by Mr. Keele's cattle,* was considered by some as an almost conclusive proof that the diagnosis was incorrect. Of its contagious character I was myself fully satisfied during the rapid extension of the disease in Mr. Keele's sheds. The history of Mr. Warden's losses, and the deaths in the Hupeh Road, will probably be sufficiently convincing for my readers. That this particular feature of Cattle Plague has been less marked in Shanghai than in England cannot be regarded as an argument of much importance when viewed along with the pathological facts which can be adduced to prove the correctness of the diagnosis. For my own part I prefer to regard it rather as bearing favourably upon the opinion which I have elsewhere expressed, that the disease is probably at the present date as truly endemic in China as in Russia. If this can be proved, modifications in intensity etc. follow nearly as a matter of course.†

Quoting from Memorandum No. 2, I note that the period of incubation in this disease is probably under 10 days; this was inferred but not distinctly proved. The average duration from the date of manifest infection to the time of death varies, so far as my observations go, between 3 and 7 days; the average is probably correctly stated at 4 days. The symptoms exhibited vary within certain limits, differing in the early and advanced stages of the disease. With the onset of the malady there is loss of appetite, cessation of rumination, more or less distinctly marked pyrexia, depression of the vital energies, constipation, and a watery discharge from the eyes and nostrils. In the advanced stages constipation is exchanged for dysenteric purging, the discharge from the nostrils becomes purulent or blood-stained, there is often an uneasy restlessness indicative of abdominal pain, the breathing is laboured, and with a further depression of the powers of life the extremities become cold. In milch cows the lacteal secretion is diminished from the first, and soon becomes entirely suppressed. I give one example from among many which I have had an opportunity of observing:—

Date.	Amount of Milk Yielded.		Remarks.
	Morning.	Evening.	
1st day, being the day preceding that on which the cow was manifestly ill.	6½ bottles.	4¼ bottles.	
2nd day,	6 „	3¼ „	Her food was not finished at night.
3rd „	5 „	2¼ „	Feeding badly; refused altogether at night.
4th „	1¾ „	1 „	Has eaten very little.
5th „	Secretion arrested.		Refuses altogether to feed. Diarrhœa commenced.
6th „	ditto.		Worse in every way.
7th „	ditto.		Died.

Loss of appetite and cessation of rumination are, generally speaking, the first symptoms which attract attention. In the advanced stages of the disease the animal refuses food absolutely. I have made as yet no thermometrical observations, but have inferred a heightened temperature from the accelerated pulse

* I refer to the cattle kept by Seujee, and stalled at the Horse Bazaar. I do not know what precautions were taken to guard against the introduction of disease among these animals, but I can speak positively as to the care taken by Mr. Keele to prevent extension from his sheds. The affected cattle were closely confined to a paddock which was afterwards ploughed; the old sheds were all pulled down and rebuilt, any timber employed a second time being first thoroughly charred; the yard was refilled with earth; disinfectants, especially carbolic acid, were freely used from first to last.

† I need scarcely remind my readers here of the uncertain power of those influences which determine the spread of an epidemic.

(varying between 70 and 90 according to my own observations,) and from the eagerness with which animals in the earlier stages seek to cool their bodies in water when opportunity permits. There is more or less suffering from thirst, which in the advanced stages is often excessive. Depression of vital energy is shown by the listless movements, the drooping ears, the low carriage of the head, and by the lowered temperature of the extremities; the drooping ears give the animal suffering from the disease a very characteristic appearance. The discharge from the nostrils varies greatly both in quantity and quality, in some cases appearing simply as an increase of the natural secretion, in others being purulent, viscid and blood-stained. In the bull belonging to Mr. KEELE which recovered, it was very profuse, hanging from the muzzle in large tenacious masses of a greenish yellow colour. Where this symptom has been absent the mucous lining after death shews in a less degree the characteristic morbid changes, but I have never seen the membrane free from disease. In one case, reported at page 68, I was informed before the nostrils were examined after death, that there had been no such discharge, but I found the cavities nearly filled with fluid of a most offensive character exuded from an extensively diseased surface of mucous membrane. Discharge from the eyes is seldom absent; when the conjunctival inflammation is severe it gives a very marked character to the head; the eyes then appear deeply sunk between the red edges of the swollen lids, from which a profuse purulent discharge escapes, accumulating at the inner angles and running down the sides of the nose. I noticed tolerably profuse salivation in one or two cases. In the hope of inducing the sick animal to resume chewing the cud, the natives occasionally tie a band of hay across the mouth, in champing which an increased flow of frothy saliva gathers, and running from the lips may deceive the observer who is looking for increased discharge from the mouth and nostrils as a sign of disease. Dysenteric purging is a marked and constant symptom in the advanced stages of the disease, and bears a pretty close relation to the severity of the intestinal lesions. In my second Memorandum I noted the reasonableness of anticipating that the bowels would chiefly suffer in Shanghai. The laboured breathing is peculiar, inspiration shallow, and expiration a grunt. In many cases this depends no doubt upon the affection of the windpipe and bronchi, in others it seems to indicate an effort to confine respiratory movements to the chest, while in others again, in advanced stages of the disease, it is simply the noisy shallow respiration preceding death. I have never observed redness between the toes with scaling of the epithelium. I have only once noticed an eruption on the skin; this was in the case of the bull already referred to as being the only example of recovery; his loins, back and belly were covered with a moist crusted eruption, and he lost his hair. Cough is not a prominent symptom; it was observed, however, in some of the cases, and in one was the first indication of disease; it may be described as dry and husky. The vulva in cows appears open, swollen, and much congested; I have seen it superficially ulcerated and covered here and there with patches of viscid puriform secretion. I have examined the bodies of 5 cows destroyed by the disease while in calf; none of them had aborted; 3 were about five months gone, one was seven months gone, and one had reached the 279th day. The urine passed in the advanced stages presented a dark brownish red colour.

The lesions are confined almost exclusively to mucous membranes, and are remarkably extended to all such surfaces in the body. They appear as the result of catarrhal inflammation of varying degrees of intensity, which has something of a specific character, indicated by the leaden or purple discolouration of the congested membrane seen from the very commencement, by the frequent blood extravasations into the sub-mucous tissue, by the croupous or diphtheritic exudation in the windpipe, and by the peculiar affections of the solitary intestinal glands. Serous membranes are singularly spared. I have had repeated occasion to mention an appearance "as of the first stage of peritonitis," seen on opening the abdominal cavity, and I have used this guarded expression advisedly, for although at the very onset of the disease the existence of an apparently active hyperæmia of the peritoneum is indicated by the pink discolouration of the serous surface of the bowels, still, beyond a deepening or an alteration of the tint from pink to shades of blue or purple, I have never observed a single indication of advancing inflammatory change; in no one instance, even the most severe and prolonged example of the disease where the intestinal lesions were most extensive, have I detected any diminution of the natural gloss of the membrane, fluid in the cavity of the

peritoneum, or plastic exudation. I have never seen increased vascularity of the pleuræ nor any exudation in connexion with these membranes.

I now proceed from general statements to more particular descriptions of the lesions.

The *Conjunctivæ*, which are nearly always much congested during life, do not by any means constantly retain this appearance after death. I have seen blood extravasation in the sub-mucous tissue. The mucous lining of the *nostrils* suffers variably, but I have never seen this membrane free from morbid change; from the first there is red, purple or leaden discolouration, due apparently to the increased vascularity of catarrhal inflammation; in the more advanced stages there are superficial ulcerations, and the membrane is more or less extensively covered with adherent patches of viscid, puriform exudation. The *mucous membrane* of the mouth is ulcerated the ulcers varying in size from a pin's head to a large melon seed; they are scattered over the smooth surface of the gum, lip and posterior third of the roof of the mouth, and occur also on the rough lining of the cheek; they are of no great depth. On the anterior third of the tongue, the fungiform papillæ appeared in two or three cases raised and of a bright vermillion tint; the base of the tongue was frequently found covered with a viscid greenish yellow deposit extending for a short distance into the œsophagus, possibly exudation detached from the interior of the windpipe and partially swallowed.

The lesions of the *larynx* and *trachea* have been in every case peculiar and characteristic, varying in degree according to the individual attacked or the stage of disease reached. The mucous lining is discoloured with red, pink, purple and leaden tints due to increased vascularity, or to sub-mucous blood extravasation. Such tints are generally most intense in the neighbourhood of the vocal cords. The mucous surface is more or less extensively denuded of epithelium, and more or less covered with a viscid puriform secretion. In severe cases ulceration extends quite through the sub-mucous tissue, and fibrinous exudation unites the disintegrated tissues into friable blood-stained casts of the interior of the tube. I have spoken elsewhere of the exudation as croupous or diphtheritic, and cannot now find more expressive terms for its description. By "croupous" I mean a tolerably easily detached false membrane of no great thickness, seated on a surface denuded of epithelium; by "diphtheritic" I wish to convey the idea of a more firmly adherent, tougher and thicker tissue situated on a more deeply ulcerated base. The sub-mucous blood extravasations are frequently very extensive, appearing in streaks, dots and patches; the peculiar discolourations are greatly due to them. Occasionally the interior of the windpipe is filled with an abundant froth, white or pinkish, and this may extend into the larger bronchi. I have once seen an abscess in the substance of the trachealis muscle.

The *Lungs* and *pleuræ* have been examined carefully in every postmortem at which I have assisted, but I have only once seen an appearance of pneumonic complication (see page 70). Venous congestion is common enough, but appears to be a mechanical result from the gradual failure of the heart's action. I have never seen the slighest indication of pleuritic inflammation. On two occasions I noted blood extravasations in the sub-serous tissue of the lining of the *pericardium*. I have already mentioned the presence of froth in the *larger bronchi*. I have seen increased vascularity of the mucous membrane in these tubes, but never any exudation.

On opening the *abdominal cavity* the attention of the observer is at once attracted by the pink patchy discolouration of the omentum and surface of the paunch, and by the varying shades of pink, blue and purple which colour the serous surface of the intestines. I have frequently observed spots of ecchymosis in the sub-serous tissue, but, as elsewhere stated, have never seen roughening of the peritoneum or exudation of any kind into its cavity. The stomachs have been in every case distended with the food last taken, the processes of digestion appearing to have been arrested at the onset of the disease. In the paunch I have noticed a peculiar softened condition of the epithelium which permitted of its easy detachment. The lining of the fourth stomach in every case in which it was examined was found to be much congested and the seat of more or less extensive ulceration. The mucous lining of the *intestinal canal* was, in by far the greater number of cases, diseased throughout; the most serious lesions were usually seen in portions of the small gut; it generally appears in patches swollen, softened or thinned; it is usually of a dirty red colour, varied here and there by shades of pink or purple, obscured by a more or less viscid, puriform and blood-stained secretion which adheres to the surface.

In the large gut the longitudinal folds shew as red streaks on the surface of an otherwise naturally coloured lining; in the small gut the discolouration is more equally diffused. Blood extravasations are common, and occur both on the surface of the membrane and in the sub-mucous tissue. Ulceration varies from a mere diffused stripping of epithelium to a distinct circumscribed destruction of tissue. I observed in one or two cases the surface studded with small circular ulcers of some depth which appeared to mark the situation of the solitary glands. The position of these glands was indicated here and there in many cases by a raised blue or purple spot about the size of a No. 2 shot, in the centre of which the small orifices of the glands were frequently to be seen. A peculiar appearance, somewhat resembling the special lesion of Enteric Fever, was noted in a few cases; in these the cavities of the glands were filled with a cheesy looking substance which protruded from their mouths appearing as yellow spots on the mucous surface. I have frequently noticed bluish black points, of about the size of a large pin's head and of tolerably firm consistency, partially adherent to the surface of the lining of the bowel, and have regarded these, correctly or incorrectly, as the extruded contents of the glands. The special appearances in connexion with the intestinal glands were not always observed. So far as my observations go they are confined to the solitary glands.

The *Liver*, *spleen* and *kidneys* appeared to be healthy in every case. The contents of the gall bladder are occasionally altered in colour—from the natural clear green to a dirty yellow. The nervous centres were never examined. The blood in every case of advanced disease was fluid, and dark in colour.

Some observers have described peculiar appearances revealed by the microscope in the muscular tissue of animals destroyed by Cattle Plague. Without denying the importance of such investigations, circumstances have directed my attention rather to the practical question whether or not it is possible to detect by ordinary inspection the diseased condition of the beef taken from the carcase of an animal suffering from this complaint. A disease which runs such a rapid course cannot be supposed to cause such an absorption of fat as would give a marked character to the meat, and experience proves that it does not do so. Decomposition sets in early, but this is a fact of no practical significance. When the animal is not slaughtered until disease is so far advanced as seriously to affect the heart's action, and to occasion extensive morbid change in the mass of the blood, the beef may be expected to present an altered (darkened) colour, due to the stasis or even extravasation of imperfectly aerated and partially decomposed blood, but the existence of even this probable morbid alteration has not been as yet satisfactorily proved.* As the result of my experience during the past few months, I am able to express a decided opinion that it is practically impossible to distinguish such meat from the beef taken from an animal slaughtered in perfect health.

* The native butchers, as Dr. THIN tells us, slaughter the animal as soon as the disease is unmistakeable.

M.—Dr. Alexander JAMIESON's Report on the Health of Shanghai for the half year ended 31st March, 1872.

IT is by no means easy for any one practitioner in a place so large as Shanghai to produce an exhaustive report upon the health of foreigners and natives during any assigned period. The multitude of facts to be observed and the number of observers, although rendering the possible material abundant, enhance the difficulty of collecting it and bringing it into a manageable shape. Little more, however, than the trivial incidents of ordinary routine practice swells the heap of unarranged and therefore useless observations, and under any circumstances these, wherever recorded, are of absolutely no interest to the profession. Whenever the prevalence of an epidemic or of any special type of disease attracts attention, the medical men in Shanghai are ready to mass their observations and bring them into a common stock. There is thus little or nothing lost which could be of interest to the profession in China, and indirectly of importance to the public. But failing the prevalence of an epidemic or the occurrence of anything noteworthy in the medical history of the place, the Shanghai Report will often necessarily take the form of a general and scanty summary of the causes of death, supplemented, I trust, by special memoirs on diseases which from their form, their frequency, rarity or fatality, attract the attention of the scientific observer. Immediately preceding this paper will be found the first of these special reports kindly furnished by Dr. Edward HENDERSON, the Health Officer of the Municipality, whose official position affords him the best opportunities for studying the malignant epizootic which for several months has raged in Shanghai and the neighbourhood. To that important subject he has accordingly devoted his Memorandum, and I have no doubt that the obvious usefulness of such special records when collected and made readily accessible to the entire body of practitioners in China will stimulate the desire we each have to explore some particular field, what that field may be depending upon each person's opinion of its fertility and present lack of cultivation.

For the following note upon the meteorological statistics of the winter six months of the years 1867 to 1871–72 I am indebted to Mr. C. DEIGHTON-BRAYSHER, Assistant Harbour Master at this port:—

During the last quarter of 1871 the total duration of rain was greater than in the corresponding period of any year since 1868. The aggregate for each year since 1867 was as follows:—

Oct. to Dec. 1867,... 74 hours	Oct. to Dec. 1869,... 86 hours	Oct. to Dec. 1871,... 151 hours
" " 1868,... 199 "	" " 1870,... 69 "	

On the other hand the total duration of rain during the first quarter of 1872 was less than in the corresponding period of any year since 1867:—

Jan. to Mar. 1867,... 169 hours	Jan. to Mar. 1869,... 298 hours	Jan. to Mar. 1871,... 64 hours
" " 1868,... 297 "	" " 1870,... 134 "	" " 1872,... 58 "

In addition to the 58 hours of rain, we registered during the first quarter of this year 57 hours of snow, the greatest fall since 1862. No observation as to the quantity of rain-fall in inches was made.

There was little difference between the ranges of the barometer during the last quarter of the years 1867–71. The highest register was in December 1871 when, though a very unusual occurrence, the mercury reached 30.73 in., a strong N.W. wind blowing for 7 consecutive days. For the same period of these years the minimum height was 29.87 in., in October 1870.

The maximum reached during the first quarter of the last six years was 30.66 in., in March 1871 and January 1872. The minimum for the same period of the same years was 29.60 in., in March 1867. The minimum for the first quarter of 1872 was 29.91 in.

For the past five years the maximum temperature registered during the last quarter was 82° F., in October 1867 and October 1870. In December 1868 the thermometer registered a maximum of 71° F. The minima of the quarter during five years were:—

1867,..... 26° F.	1869,..... 21° F.	1871,..... 19° F.
1868,..... 19° „	1870,..... 22° „	

The maximum reached in the first three months of the past six years was 80° F., in March 1872. The minima, all registered in January, which in each case was by far the coldest month, were as follow:—

1867, ... 26° F.	1869,..... 21° F.	1871,..... 21° F.
1868,..... 27° „	1870,..... 22° „	1872,..... 23° „

The prevailing winds in October are N.E. to N.W.; in November, December and January N.W.; in February N.E., and in March very variable.

In 1867 there were during the first quarter 11 gales; in 1868, 9; in 1869, 8; in 1870, 5; in 1871, 4; and in 1872, 7.

The observations above recorded were taken at Woosung.

It is not at present possible to collect under any general law the sequences observed between atmospheric conditions and the development of certain diseases. But it may reasonably be expected that as facts accumulate they will become capable of arrangement under empirical laws which latter will eventually give place to laws of complete generality. The importance of such guides, should they ever be obtained, will be acknowledged by everybody, and therefore the establishment of stations for accurate and constant meteorological observations at all the open ports in China is much to be desired. It is seldom possible to find amateurs supplied with the necessary instruments or endowed with sufficient skill, diligence or leisure to render records kept by them either very complete or very reliable.

The local conditions in Shanghai are every year becoming more favourable to health. The settlement is itself steadily rising, a fact of which any one may satisfy himself by observing the sunken foundations of the older native houses or the depth to which a cutting has now to be made before water is reached. Drainage is progressing with great rapidity, the only objection which can be taken to the Council's action in this matter being the carelessness with which drainage operations are carried on during hot weather. In many crowded native quarters better houses are gradually replacing the shanties which were run up during the rebellion without regard to comfort, health or decency, and which have since been precariously held together by shoring and patching. The roads out of the settlement are being improved and extended, so that within a few months there will be a choice of at least half a dozen country drives each having its peculiar attraction. It is perhaps rash to make any comprehensive statement without figures as a guide, but I am convinced that *pari passu* with the improvements just noted, the health of Shanghai has improved. There may be, and is, in fact, little alteration in the death-rate as roughly estimated from year to year, but there is a marked diminution in the amount of general "seediness" arising from more or less slight hepatic derangement, or absorption of malarial poison. I have before noted the almost complete disappearance of the so-called "Shanghai Fever," a malignant or at any rate extremely fatal fever of the remittent type, and it is my experience, supported, I do not doubt, by that of other practitioners, that intermittents and neuralgia, as well as derangements of periodic functions are becoming slowly less prevalent among the residents who are careful to place themselves under the best hygienic conditions available. The only published description of "Shanghai Fever" which I can recall is one by the late Dr. HENDERSON in his report on the working of the Chinese Hospital for 1861. The following extract from that report will give those who have not seen this form of disease in Shanghai a notion of its severity:—

It is purely a severe form of remittent fever with daily exacerbations and remissions, but if it is neglected all the symptoms of continued fever supervene, and it differs but little from a severe case of typhus fever. It usually commences suddenly; the patient is seized with severe rigors which last from 30 minutes to one or two hours, then great heat, intense headache, flushing and fever come on, followed by profuse perspiration. Occasionally the disease advances insidiously and gradually and its nature is only apparent after a certain period. In severe cases during the cold stage there is retching and vomiting, the pulse is feeble and intermittent, the extremities are cold and livid, an intense feeling of cold pervades the whole body. Reaction ensues after a time, the skin becomes dry and pungently hot, the face is flushed and turgid, the pulse is quick, full and bounding, the mind often wanders with occasional delirium. After a few

hours these symptoms subside, a general and profuse perspiration breaks out, the pulse falls in force and frequency, and the patient lies prostrate and completely exhausted. If the disease is neglected or left to itself, the tongue becomes coated with a dry brown fur, the liver becomes disordered, there are bilious vomiting and diarrhœa with tenderness and pain in the right hypochondrium; rheumatic symptoms shew themselves, purpurous eruptions break out on the skin; blood is discharged from the mucous membranes; great prostration ensues, and the patient dies comatose or delirious.

This was a tolerably faithful description of a disease prevalent in Shanghai at a time when Deputy Inspector-General CURRIE, reporting to the head of the English Army Medical Service, could say without fear of contradiction—"It will be conceded by anyone who has visited the settlement, that it abounds in all the "elements of unhealthiness in an eminent degree."

Vaccination was constantly performed during the winter six months, at the Municipal depôt in the Ningpo Road, and at the native dispensary in the city. The diligence with which this important work is now pressed must have in process of time, if it has not already, a marked influence upon the propagation and spread of small-pox within the settlements. It will be observed that there was no fatal case of small-pox among foreigners during the period, and, so far as I know, only two cases, both benignant. Inoculation is however still practised. It is satisfactory to be able to report that the Municipal Council has instructed its Health Officer to take immediate steps for the establishment of a lock hospital. Upon these facts we may reasonably congratulate ourselves, for even now, and in England, there is sufficient abject superstition to give life to a large party which upon religious grounds opposes the control of prostitution, and to a small party which upon the same grounds opposes the control of small-pox. It may not be generally known that the experiment of brothel-suppression has been tried, but with the most disastrous results. In 1845 the Berlin brothels were closed, and in 1848 the amount of disease and illegitimacy was found to be far greater than before. Yet this is the alternative to which the self-styled religious classes would force legislators. I have nothing to add to my remarks in last Report upon the advisability and feasibility of the sanitary inspection of public women in Shanghai.

No epidemic prevailed last winter. A few cases of *Fung-sha* presented themselves in October, and in November whooping cough seemed likely to break out, but was limited to a very few cases, two of which (doubtful) occurred among the half-caste children at the Eurasian school.

While free from epidemics, however, an alarming epizootic manifested itself in the middle of March among the horned cattle in Shanghai and the neighbourhood. It is unnecessary for me to do more than mention the fact, as Dr. HENDERSON'S exhaustive paper which immediately precedes this Report deals with all the questions arising out of the matter. Unluckily the Consular and French Municipal authorities, instead of taking decided steps to prevent the slaughter of diseased animals and the sale of diseased meat, employed themselves less profitably in discussing whether the malady was really what is technically known as Rinderpest, and in assuring the public "qu'il n'y a aucunement lieu de s'alarmer." For practical purposes it is perfectly immaterial what the disease is called. By whatever name it may be known, it is certainly a highly contagious, malignant fever which within a few days effects so profound an alteration in the blood and other vital fluids that the meat bathed by them putrifies with extraordinary rapidity. As nobody has actually died in consequence of eating meat so diseased, it might be rash to assert that the dyscrasia of the blood which kills the animal renders the flesh poisonous to human beings; but it is absurd to recommend people not to be alarmed when the meat which supplies their tables may, for anything they know, have been cut from animals dead of a disease which from the postmortem appearances might be described as a combination of diphtheria, typhoid fever and dysentery. For my own part I have no hesitation in saying that I am not alarmed, but this state of confidence is due to total abstinence from beef in any form.

The following is the foreign death return for the six months:—

OCTOBER.	NOVEMBER.	DECEMBER.	JANUARY.	FEBRUARY.	MARCH.	TOTAL.
13	8	7	7	2	2	39

The figures for January, February and March are taken from the burial returns. Of the 39 deaths above recorded, 2 were of children under 2 years; 1 followed on a wound, and 3 were due to drowning. Of the remainder, 2 arrived in a dying state, and 18 were non-residents. Thus the mortality among adult residents is reduced to 13, or, including the infantile mortality and calculating the foreign community at 2,000, which I have no doubt is considerably below the mark,* the annual death-rate estimated for this period among residents of all ages was 15 per thousand.

Among the causes of death, "heart disease" and aneurism took important places. In October there were 2 deaths from aneurism, in November 1, in January 1, and in February 1. Of these 5 deaths, 4 occurred among residents, and 1 took place the day after the sufferer's arrival in Shanghai. In August and September there had been one case each month, so that within a very short period there were 7 deaths from aneurism, besides at least 2 which occurred in persons occasionally at the port. There were moreover 6 cases of sudden death between October and December, 5 of which occurred on the river, and though not certified, they were reported at the time to be due to aneurism. Besides all this, a certain number of individuals known to be suffering from aneurism left Shanghai under advice about that time or since. It is beyond doubt that many more persons have aneurisms than are conscious of their disease. VALSALVA was the first to assert this,† and since his day every dissecting room proves the fact. Chance therefore had probably a great deal to do with crowding these deaths from aneurism into a brief period. But the causes to which dilatation of the arteries is due, especially where there exists any constitutional tendency to degeneration, exist in full force in Shanghai. Dr. REID (pp. 45–47) has entered largely into this subject, but I would add to what he says, that the sudden and violent change from the compulsory inactivity of summer to the gymnastic exercises and athletic sports to which a large number of young men enthusiastically devote themselves at the first appearance of autumn freshness, is of itself sufficient to overstrain the arterial system. If it be true, as it is now laid down by English authorities,‡ that even the repeated spurts in a boat race, by overdrawing on the reserve force of the involuntary muscles to supply the demands of the voluntary, render the heart's action irregular and lay the foundation for mitral and aortic insufficiency, it is still more strikingly evident that sudden transitions from a life of comparative indolence to one of stern and sustained discipline are in the highest degree hurtful. To put the matter at once in a popular and intelligible light, nobody with any pretensions to an acquaintance with horseflesh would think of taking an animal from grass and immediately subjecting him to a daily three mile gallop over turf. Yet this illustration only feebly sets forth what is every year done to themselves by many men in Shanghai. It appears that no case of aneurism has, at any rate of late years, presented itself at the Chinese Hospital in the Shantung Road. One case in which the superficial femoral on one side, and the common femoral on the other were the seats of aneurismal tumours was treated two years ago in the Hongkew Hospital for natives; but observation in this province fully bears out Dr. JOHNSTON's opinion that the simple habits of living adopted by the natives, and their phlegmatic and unexcitable natures probably give them some immunity from the disease.§ On the other hand Dr. REID, while admitting that at Hankow aneurism of the extremities is rare amongst natives, states that arterial degeneration is common enough.

There were 5 deaths from pulmonary phthisis, the disease in each case dating from a period previous to the patient's arrival in Shanghai. I have not seen phthisis originate here, and it is well known that such an occurrence is extremely rare. But I have not found the course of the disease in imported cases arrested or even sensibly modified by residence in Shanghai. Dysentery may almost be considered endemic, but it is to be expected that as by the extension of drainage we are gradually expelling the worst forms of paroxysmal fevers, we shall in process of time by obtaining an untainted water supply reduce the annual number of dysenteric cases to a minimum. So long as Shanghai water continues to be what it is we cannot fail to have

* The Census of 1870 gave 1,982 foreign residents of all ages.

† H. F. ALBERTINI, *Animadversiones super quibusdam difficilis respirationis vitiis a læsâ cordis, et præcordiorum structurâ pendentibus.*

‡ *Lancet;* vol. i., 1872, p. 444.

§ 25th Report of the Chinese Hospital, p. 15.

dysentery and enteric fever as constant guests. Water for drinking and cooking purposes being obtained exclusively from the river, the prevalence of an epidemic among the shipping population, and especially of an epidemic of diarrhœa, dysentery or typhoid fever, implies the spread of these diseases on shore. Something might be done by extending and enforcing article 9 of the *Harbour Regulations for the Port of Shanghai**. It might with vast advantage be made compulsory on masters of vessels to send their men ashore as soon as symptoms of serious bowel derangement appear. A periodical official visit would render evasions of the rule tolerably infrequent. I need not here enter into a discussion of the means of accommodating such patients. It is a fact which may be taken for granted that any number of patients supplied by the vessels in port could be well and economically accommodated on shore. Still, however, the junks lying off the city would continue to contaminate the stream did an epidemic break out among them. While therefore every means should be adopted to reduce the evil to a minimum, the only way to abolish it altogether is to obtain a purer water supply than the river can ever afford. The deaths from dysentery were 9 during the half year. Of these, 6 occurred in non-residents; one patient was an infant, and in 2 cases among residents the cause of death was not certified. Enteric fever furnished 2 fatal cases among residents—one in October and one in November. There were likewise among residents in the same months 2 fatal cases of suppurative hepatitis. On the whole, the period under review was one of fair average healthiness.

By the kindness of Mr. PENFOLD, Superintendent of Police for the English and American Settlements, I am able to give a brief account of the mortality among natives resident within the Municipal limits. One source of error must be borne in mind, namely that when natives of neighbouring cities or of the Chêkiang province believe themselves to be in a hopeless state their friends invariably endeavour to remove them to their birth-places before death occurs. Hence a large number who sicken in Shanghai and whose deaths ought to swell the native mortality of the place, die in other cities or on their way thither. In the following table it will be observed that the number of female children is less by one third than that of male children. Such a discrepancy could not occur without interference, and Mr. PENFOLD, whose opportunities of observing the manners and customs of the natives under Municipal control are unequalled, attributes it to two causes—infanticide, which is, without the possibility of check, perpetrated in every native alley in the settlements, and parental neglect of girls at all times, but especially during illness.

CHINESE POPULATION OF THE ENGLISH AND AMERICAN SETTLEMENTS [March 1871].

	MALES.		FEMALES.		TOTAL.
	OVER 15.	UNDER 15.	OVER 15.	UNDER 15.	
English Settlement,	29,408	7,907	12,288	5,716	55,319
Hongkew,	6,738	1,987	2,876	970	12,571
	36,146	9,894	15,164	6,686	67,890
	46,040		21,850		

The deaths were 168, distributed as follows:—

	ENGLISH SETTLEMENT.	HONGKEW.	MALES.	FEMALES.	TOTAL.	LIMITS OF AGE.
October,	23	21	24	20	44	2† & 76
November,	23	14	21	16	37	4‡ & 68
December,	16	14	21	9	30	1§ & 74
January,	8	9	11	6	17	1§ & 78
February,	8	12	13	7	20	3 & 69
March,	7	12	10	9	19	10 & 82
	85	82	100	67	167	
	167		167			

* That article runs as follows:—"A vessel arriving with a contagious disease on board shall not come nearer the lower "limit of the harbour than one mile, shall fly at the fore a yellow flag, and shall not allow any one to disembark or come on "board without permission from the Harbour Master's Office."

† Possibly not more than 8 months old. ‡ Possibly 3 years. § A few days perhaps.

The maximum age, 76, at which death occurred in October was in a woman. A man died at 68 in November; a man and woman at 74 in December; while the maxima for the succeeding months were reached by women. Subject to the limitation noted above, which, on account of child-bed mortality, applies less to women than to men, the mortality among males for the 6 months, as shewn by these tables, was at the rate of 4.34 per thousand per annum, and that among females at the rate of 6.13 per thousand. The total native mortality was at the rate of 4.92 per thousand.

Premising that the ignorance of Chinese practitioners is only equalled by their conceit, and that their nosology is only slightly more absurd than their therapeutics, I give the following table of causes of death, compiled from Chinese sources. As a classification it is utterly worthless, but from it one or two important facts may be extracted.

The native mortality in the English and American Settlements for the period under review is thus set forth :—

Disease.	October.		November.		December.		January.		February.		March.		Total.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
1. 風寒 *Fêng-'han*, which seems to include bronchitis and pneumonia,	6	1	...	...	...	...	...	...	...	...	...	...	7
2. 生產 *Shêng-ch'an*, Childbirth,	...	4	...	6	...	...	...	...	...	...	...	...	10
3. 老病 *Lao-ping*, a convenient term covering every disease at the end of which the patient dies exhausted. Tuberculosis, and the syphilitic and cancerous cachexiæ find places under it,	7	6	8	3	11	4	6	2	8	5	4	5	69
4. 急病 *Chi-ping*, or "violent disease," another beautifully convenient and comprehensive term,	5	7	4	1	2	2	2	2	4	1	3	2	35
5. 傷寒 *Shang-'han*, which seems to be characterised by intense heat of skin, including probably typhus, pneumonia and acute tuberculosis,	4	...	3	4	2	1	2	1	...	...	...	...	17
6. 吐血 *T'u-hsieh*, Hæmoptysis,	1	...	1	1	2	...	...	...	...	...	...	...	5
7. 咳嗽 *K'o-sou*, or cough ; chronic bronchitis no doubt, often supplemented by asthma,	...	1	...	...	...	...	...	...	...	...	...	...	1
8. 發沙 *Fa-sha*, which, I am told, includes every state of insensibility,	1	...	1	1	2	1	...	1	...	...	...	1	8
9. 鼓脹 *Ku-chang* or "drum dropsy," Ascites,	...	1	...	1	...	...	...	...	...	...	...	...	2
10. 腹疾 *Fu-chi*, choleraic diarrhœa,	...	...	1	1	...	...	...	...	...	...	...	...	2
11. 巡死 *Hsün-szŭ*, suicide,	...	...	1	...	1	...	1	...	1	1	2	...	7
12. 痛風 *Tung-fêng*, or acute rheumatism,	...	...	...	...	1	...	...	....	...	...	...	1	2
13. 天花 *T'ien-'hua*, Small-pox,	...	...	...	...	...	...	...	...	...	...	1	...	1
14. Accidental Burning,	...	...	...	...	...	1	...	...	...	...	...	...	1
Total,	24	20	19	18	21	9	11	6	13	7	10	9	167

Out of the 7 suicides, one was accomplished by hanging, 5 by Opium, and the mode adopted in the remaining case is not recorded. Obviously the classification of the preceding table is quite worthless, for it would be an even chance under which one of the headings marked respectively 4, 5 and 8 a case of, for example, solar apoplexy would fall. It is curious that there should have been 10 deaths in labour during the two months October and November, and none afterwards. Ten fatal cases of labour in two months among an adult female population of 15,000, not one-fifth part of whom bear children, while the fertile minority suckle their infants for periods rarely less than 2 years, represent a very extraordinary percentage of mortality. The Chinese themselves variously estimate the death rate at from 5 to 8 per cent on all labours. From the English, Irish and Continental statistics collected by Murphy, and embracing more than

a quarter of a million of cases (*Midwifery*, 2nd Ed. pp. 698–705) it appears that childbed mortality in European lying-in hospitals, wherein moribund women are frequently received, is 1.21 per cent. In private practice of course the percentage is much lower. We shall not be surprised by the excessive mortality among Chinese women when we consider that, except in the rare instances where spontaneous evolution takes place, presentations of the superior extremity (say 0.4 per cent of all cases) must be fatal to both mother and child. Placenta prævia, fœtal hydrocephalus, pelvic tumour, distorted pelvis, insuperable rigidity of the cervix, and many other serious complications which demand interference, must terminate in the death of the mother, while the probabilities are all against a successful delivery when the labour is powerless, the uterus displaced or the placenta retained. To these we must add such formidable sequelæ as syncope, secondary hæmorrhage, puerperal peritonitis, uterine phlebitis and tetanus, while abortion in the early months with profuse hæmorrhage doubtless results in death in many instances. Altogether, in the case of a Chinese female, the physiological processes of utero-gestation and parturition are so closely surrounded by the dangers arising from no-management and mismanagement that pregnancy becomes a pathological condition but one half less formidable than typhus fever.* Instead, however, of speculating farther upon what must be, or in all probability will be, fatal cases, I will adduce a curious fact which sets in a very strong light the amount of puerperal mortality among Chinese women. For this I am indebted to Dr. D. B. McCartee who for many years resided in Ningpo, and whose intimate acquaintance with the character and language of the Chinese renders his evidence upon any Chinese question in the highest degree valuable. It is well known that there are ten Buddhist hells one of which is the "bloody lake." Beneath the surface of this lake all women who die within a month after parturition are supposed to be incontinently plunged. In order to obtain the sufferers' release large sums have to be paid to the priests who, by repeated recitations of the 血盆經, exert the same power over the purgatorial regions which, by means of masses, is exerted by the Romish clergy. Short of actual release, or during the tedious process of accomplishing it, pauses in the torment can be obtained by purchasing the privilege of affixing a few hairs cut from the dead woman's head to the inside of a certain bell set apart for this use. Every time the bell is struck during the progress of the temple ceremonies the women whose hair is attached to it rise for a moment above the lake and are allowed to catch a breath of air. As soon as the last vibration ceases they are again plunged below the surface. In 1851 Dr. McCartee happened to visit the 清道觀, a temple in the suburbs of Tzu-chi, and found that a bell 5 feet high which was used for this purpose was crammed full of hair, while alongside of it there stood a firmly packed bale of the same substance which had recently been removed from the inside. This bale was 3½ feet high and nearly 8 feet in circumference.

The following table is condensed from the records of the Shanghai General Hospital. I have omitted all patients but Europeans, a fact which accounts for one or two slight differences between this and the tables given in the recently published report of the institution. I have also omitted one case of malingering. As in last year's report, I italicise those fatal cases in which death resulted from disease presumably referable to climatic or local causes or to the action of the sun aided by personal habits.

Months.	Admissions.	Deaths.	Cause of Death.	Death from Special Classes of Disease.
October,	21	4	*Dysentery* (3), *Typhoid* (1),	4 or 19 % on Admissions.
November,	27	1	*Suppurative Hepatitis*,	1 or 3.7 % "
December,	24	1	*Dysentery*,	1 or 4.2 % "
January,	15	3	*Dysentery* (2), Bright's Disease (1),	2 or 13.3 % "
February,	12	1	*Dysentery*,	1 or 8.3 % "
March,	20	0		0
	119	10		

* "It may therefore be assumed that one out of every 5 persons attacked by typhus will die. * * * "In the year 1851, when only 68 cases were admitted into the London Fever Hospital, the mortality was only 8.82 per cent." Murchison :—*Continued Fevers of Great Britain*, p. 218.

In the above table the deaths placed opposite each month are not necessarily deaths in that month, but deaths out of the admissions in that month. In October there were actually 8 deaths, but of these only 3 occurred among the October admissions. In November there was 1 death, the patient having also been admitted in that month. In December there were 2 deaths, 1 from chronic dysentery admitted in October (duration of 55 days) and 1 from acute dysentery admitted in December (duration of 3 days). In January there were 2 deaths, the patient in each case belonging to that month. The patient who eventually died of Bright's Disease lingered until the 14th April. No death appears for February, but a case of dysentery admitted in that month terminated fatally in March.

It is a significant fact that out of 10 deaths 7 were due to dysentery, 1 to typhoid fever and 1 to suppurative hepatitis. No stronger comment could be made upon the Shanghai water supply. The following Table gives a nosological classification of the cases admitted :—

	October.	November.	December.	January.	February.	March.
A.—Zymotic Diseases.						
I. *Miasmatic Diseases*:—	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Variola,	—	—	1	—	1	—
Exanthematous Fever,	—	1	—	—	—	—
Typhoid „	* 2	—	—	—	1	1
Typhus „	1	—	—	—	—	—
Intermittent „	5	—	1	—	—	—
Remittent „	—	1	—	—	—	1
"Gastric" „	—	2	—	—	—	—
Continued „	—	—	—	—	1	—
Dysentery,	† 6	2	* 1	‡ 2	* 2	—
Diarrhœa,	—	2	—	—	—	1
II. *Enthetic Diseases*:—						
Primary Syphilis,	—	1	—	1	—	—
Secondary „	—	1	2	1	—	—
Chancre,	—	—	1	—	1	—
Phymosis,	—	1	—	—	1	—
Bubo,	—	2	3	—	—	3
Periostitis,	1	—	—	—	—	—
Iritis,	—	—	—	—	—	1
Rheumatism,	—	—	—	—	—	1
III. *Dietic Diseases*:—						
Intemperance,	1	—	—	—	1	1
B.—Constitutional Diseases.						
I. *Diathetic Diseases*:—						
Rheumatism,	—	3	2	—	—	—
II. *Tubercular Diseases*:—						
Phthisis,	1	—	1	1	—	—
Adenitis,	—	1	—	—	—	—
Orchitis,	—	—	—	—	1	—
C.—Local Diseases.						
I. *Diseases of the Nervous System*:—						
Hemiplegia,	—	1	—	—	—	—
Delirium Tremens,	2	1	—	—	—	1
Mania,	—	—	—	—	1	—
Epilepsy,	—	—	—	—	—	1
Neuralgia,	—	1	—	—	—	—
II. *Diseases of the Circulatory System*:—						
Aneurism,	—	—	—	—	1	1
III. *Diseases of the Respiratory System*:—						
Catarrh,	—	1	—	—	—	—
Bronchitis,	—	1	1	—	—	—
Pleuritis,	—	—	2	—	1	2
Pneumonia,	—	—	1	—	—	—

* 1 fatal case. † 3 fatal cases. ‡ Both fatal.

C.—Local Diseases.—*Continued.*	October.	November.	December.	January.	February.	March.
	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
IV. *Diseases of the Digestive System:*—						
Typhlitis,	—	1	—	—	—	—
Sigmoiditis,	—	—	—	—	—	1
Colic,	1	—	—	—	—	—
Piles,	1	—	—	—	—	1
Hepatitis,	—	—	—	1	—	—
„ Suppurative,	—	* 1	1	—	—	—
"Disease of Liver,"	—	1	—	—	—	—
V. *Diseases of the Urinary System:*—						
Bright's Disease,	—	—	—	† 1	—	—
Cystitis,	—	—	1	—	—	—
Enlarged Prostate,	—	—	1	—	—	—
VII. *Diseases of the Locomotive System:*						
Deformity,	—	—	1	—	—	—
Deep Abscess of Thigh,	—	—	—	1	—	—
E.—Lesions from Violence.						
I. *Accident:*—						
Contusion,	—	1	1	—	—	1
Fracture of Clavicle,	—	—	—	1	—	—
„ Humerus,	—	—	1	—	—	—
„ Radius and Ulna,	—	—	—	1	—	1
„ Rib,	—	—	—	1	—	1
„ Femur,	—	—	1	—	—	1
„ Tibia and Fibula,	—	1	—	—	—	—
„ Fibula,	—	—	1	1	—	—
Gunshot Wound,	—	—	—	1	—	—
Amputation of Toe,	—	—	—	1	—	—
Laceration,	—	—	—	1	—	—

The health of the Customs Out-door Staff was excellent. From the 20th September 1871 to the 31st January 1872 no service was lost on medical certificate. Subsequently, one man was laid up with a severe contusion of the foot, one with intestinal obstruction dependent on the passage of biliary calculi, one with neuralgia, one with congestion of the liver, and one in consequence of an operation on his throat. No death occurred. The health of the River Police was also good.

The daily sick list of the Police Force for the English and American settlements was heavy during the half year, but the causes of absence from duty were not generally very serious. There was but one case of intermittent fever. Two cases of dysentery and 4 of diarrhœa occurred. In one shape or another venereal disease attacked 7 men. One man was unfortunate enough to commence the half year with a specific sore throat, and to terminate it with periostitis, having filled up the interval with a bubo. Altogether there were 11 admissions with venereal disease—gonorrhœa, 1; cystitis, 2; orchitis, 2; bubo, 3; specific sore throat, 2; periostitis, 1. There were 3 cases of epilepsy, a fact sufficiently curious to attract attention when one considers that the average strength of the force was only 33 men. In the French force during the same period there was likewise one epileptic. The majority of the other invalids suffered from more or less slight gastric or hepatic disturbance, from venereal disease in its various forms, diarrhœa and paroxysmal fever. I find no case of either dysentery or enteric fever recorded in the list kindly furnished me by Dr. Galle, the medical officer of the French Municipality.

Foreign children were as a rule healthy during the winter six months. There were but 2 deaths—one from chronic hydrocephalus, the other from collapse following severe dysentery with great febrile disturbance. A few cases of dysentery, some of considerable severity, occurred among children during the early months of this year, curiously enough preceding by a very short interval the discovery of murrain among horned cattle. It is needless to say that milk forms the staple diet of foreign infants in Shanghai, and

* Fatal. † Fatal in April.

although I do not wish to draw too pointed an inference, the coincidence is at least noteworthy. Doubtless, as soon as the existence of murrain was ascertained, all the medical men in the place insisted upon the necessity of boiling milk before allowing children to drink it. The only corporation of young children in Shanghai that I know of is the Eurasian school. For the winter half year the average number of boarders was 15. The children in this institution are of ages pretty evenly distributed between 4 and 12. They live under the most favourable conditions, the house is well elevated, the sleeping rooms and school rooms are lofty and thoroughly ventilated, and a large compound and wide verandahs enable the inmates to obtain open air exercise in all weathers; they are carefully tended, suitably clothed and well fed. In case of illness the necessary measures are scrupulously carried out, and the large number of rooms in the house renders isolation possible whenever it may be necessary. During the six months, colds and coughs were of course frequent, and one or two of the children suffered from simple conjunctivitis. One case of strumous ophthalmia coupled with eczema of the ears, yielded rapidly to cod liver oil and syrup of the lactate of iron, coupled with appropriate local treatment. Two doubtful cases of whooping cough appeared in November. Most of the symptoms were present, but I myself never happened to hear the characteristic whoop, and from the fact that the affection did not spread it seems probable that a mistake was made. No other case of illness occurred.

The reputation of Shanghai for healthfulness has undergone many changes. At one time Shanghai was regarded as the sanitarium of China, but after a few years, residence here was declared to be more dangerous than at any other port in the East. Although this evil report was never very just, it still in a modified form clings to the settlement. Yet it is only necessary to glance at the return of causes of death among foreign residents in order to learn that while in the majority of cases the climate pure and simple cannot be charged with the event, a large number of diseases prevalent in England are here quite unrepresented.

The causes of death, among residents alone, during the winter six months were as follow:—

Aneurism,	3	Dysentery,	3
Suppurative Hepatitis,	2	Diarrhœa,	1
Atrophy of Brain,	1	Chronic Hydrocephalus,	1
Remittent Fever,	1	"Disease of the Liver,"	1
Enteric Fever,	1	Consumption,	1

Diphtheria, croup, scarlet fever, true measles, laryngitis and many other diseases common enough in England, and very fatal, especially among children, are unrepresented in Shanghai. Without therefore attempting to assert that Shanghai is the best place of residence in the world, I may at least say that, presuming ordinary care during the heat of summer, nobody diminishes his chance of life by leaving England and removing to this port.

N.—Addendum to Peking Report.

[See page 9].

During the months from October 1871 to March 1872, there were 2 deaths among foreigners, both the result of serious and chronic cerebral disturbance. One case proved fatal by apoplexy; the other by softening of the brain, but neither was in any way connected with this climate. The period under review was comparatively healthy; there was no epidemic of any sort. Towards the end of the winter and beginning of spring I was struck by the great and unusual prevalence of fever and bronchial affections. They did not seem however to be of a very severe type.

Reported Case of Leprosy.—A man from T'engchow-fu in Shantung applied to me for medicine to cure a friend affected with leprosy. The patient is 26 years old and has been affected with the disease for the last 4 or 5 years. He is married and has children. Neither his parents nor any other relatives have had any disease of this sort. His eyebrows have fallen off and there is anæsthesia of the hands, feet and body generally. His face is swollen and is of a red and black colour (bronzed). He supposes that he caught it from being exposed in some way to the *yin* exhalations of a low-lying damp locality. He says it is not very uncommon in parts of this province and thinks there is certainly 1 per mille.

Abstract of Thermometrical Observations.

Month.	Maxima.		Minima.		Averages.		Rain Fall.		Snow Fall.	
	Day.	Night.	Day.	Night.	Day.	Night.	Days.	Amount.	Days.	Amount.
October,	74°	54°	55°	34°	65°	46°	3	1¾ inch.	...	...
November,	55°	29°	27°	18°	45°	27°	1	⅛ „	...	...
December,	44°	26°	20°	9°	34°	17°	...	...	1	¾ inch.
January,	42°	21°	19°	2°	30°	12°	...	...	3	2½ inch.
February,	48°	25°	32°	10°	40°	17°	...	...	2	3½ „
March,	64°	36°	39°	20°	51°	33°	1	a little	4	2 „

Encl

Mr Bancroft
Asked
To see Mr Low
on
Nov 23

No 190 One Enclosure

DEPARTMENT
RECEIVED
NOV
23
1872
OF STATE.

Legation of the United States
Peking September 23. 1872

Frederick F. Low
to
Department of State

Subject

Statistics of foreign trade with China for 1871.

Encloses the "Returns" for that year, and refers to the large proportion which is carried on under the U.S. flag.

No 190 One Enclosure

Legation of the United States
Peking September 23. 1872

Sir:-

I have the honor to send herewith under a separate cover "The Returns of Trade at the "Treaty Ports in China, for the "year 1871."

The volume contains trustworthy information of peculiar value to all nations having commercial intercourse with this country.

The
Hon Hamilton Fish
Secretary of State

The "Returns" show that the entire foreign trade for 1871 is much in excess of any previous year, and that American trade maintains its rank of second in the list with a larger increase for the year than that of any other country.

An examination of the Summary of all the business of the ports for the year (see pp 236. 237, 238 and 239) discloses the fact that the American flag covered nearly 31 per cent of the number of vessels entered and cleared, 43 per cent of the entire tonnage, nearly

nearly 37 per cent of all the imports and exports, and that substantially one quarter of all the revenue collected for the year was derived from vessels and merchandize covered by the United States' flag.

These figures furnish the strongest argument that can be adduced in favor of well regulated and well supported Consulates, to whose immediate care and protection these vast mercantile interests must of necessity look; they ought also to remove all doubts, if any

still

still exist, as to the propriety and absolute necessity of providing for the education of interpreters, — a subject which was more fully discussed in my No 188.

I have the honor to be
Sir,
Your Obedient Servant
Frederick F. Low

Enclosure

No 1 Returns of Trade at the Treaty Ports in China for the year 1871

Ent. action to be taken Nov 23 Mr Bordain

Ack.

No 191 3 Enclosures

DEPARTMENT OF STATE RECEIVED NOV 23 1872

Legation of the United States

Peking September 24. 1872

Frederick F. Low

to

Department of State

Subject

Light-Houses in China

Encloses copy of a note from Mr Rob^t Hart on the subject, and a list of Lights on the whole coast, and a chart showing those in the Shanghai District.

No 191 3 Enclosures

Legation of the United States
Peking September 3rd. 1872

Sir:-

Referring to my No 62 of April 10 1871 I have now the honor to enclose copy of a note from the Inspector-General of Customs with reference to Light-House affairs on the Coast of China.

With this note were enclosed a list of Lighthouses, Lightvessels, Buoys Beacons &c already constructed, and a chart showing the Lights in the Shanghai and Ningpo Districts, which are also enclosed

Hon Hamilton Fish
Secretary of State

Mr

Mr Hart's note, you will observe, contains information respecting the plan of operations for the next two years; it also gives the average cost of construction and maintenance of Light-Houses and Light-ships.

I have the honor to be, Sir,
Your obedient servant
Frederick F. Low

Enclosures

No 1 Mr Hart to Mr Low Sept 20/72
" 2 List of the Chinese Lighthouses Lightvessels Buoys & Beacons
" 3 Chart showing the Lights in the Shanghai (and Ningpo) District

Enclosure No 1
Despatch No 191

No. 52.

Special Series.

Inspectorate General of Customs.

Peking, 20th September 1872.

Sir:-

I have the honor to forward for Your Excellency's information, and for communication to the State Department most interested, copies of a "List of the Chinese Light Houses, Lightvessels, Buoys and Beacons, (Corrected to 1st August 1872) and a "Chart

His Excellency
The Hon. F. F. Low
Envoy Extraordinary &c
Peking.

"Chart showing the Lights in
"the Shanghai (and Ningpo)
"district" recently prepared for
me by the Engineer in Chief
Mr. Henderson.

2. The chart shows that the
lighting of the Shanghai and
Ningpo District has been amply
provided for, and the list — of
which a new edition will appear
annually — will serve as a point
of departure, and enable future
enquirers to trace the progress of
the work from year to year.

3. During my recent visit to the
Ports I inspected all the sea lights
and landed at the various places
selected as sites for additional
lights; I have since made

arrangements

arrangements for lights to be shown on Turnabout (Foochow District) and on the Shantung Promontory (Chefoo District) before this time next year, and for others to be shown on Breaker Point and the Lamocks (Swatow District), on the Pescadores (Amoy District) and on Shalin-lien (Tientsin District) during the course of the year following (1874).

4. I may add that the first cost to the Department has been, in round numbers—

for a Lightship Tls 30.000 = £10.000 = Fr. 250.000

" " First class light " 9.000 = £3.000 = Fr. 75.000

" " Lower Light Keepers Houses " 12.000 = £4.000 = Fr. 100.000

and

and that the annual expenditure on account of wages and stores is, for a lightship say Tls 4,800 = £1,600 = Francs 40,000, and for a Light house about Tls 3,000 = £1,000 = Francs 25,000

I have the honor to be

Sir,

Your Excellencys most obedient Servt

(Signed) Robert Hart

Inspector General

Sick

ack

W. Burlingame

No 192

Legation of the United States
Peking, October 3. 1872.

Frederick F. Low
to
Department of State

Subject

Reception of
Department despatches.
Acknowledges receipt
of numbers 91. 92. 93. 94.
and 95.

No 192

Legation of the United States
Peking October 3. 1872

Sir:-

I have the honor to acknowledge the reception of Department despatches numbered 91, 92, 93, 94 and 95

I am, Sir,
Your obedient Servant
Frederick F Low

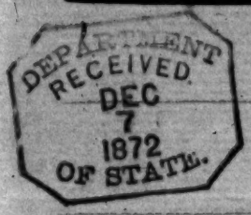
Hon Hamilton Fish
Secretary of State

Sub

acknd

A. de E.

No 193 2 Enclosures



Legation of the United States

Peking, October 5, 1872.

Frederick F. Low

to

Department of State

Subject

Correspondence between the American Minister, Mr Reed, and the Imperial Commissioners, in 1858, about Consuls.

Encloses copies of the Correspondence, as requested by the 1st Diplomatic Bureau.

No 193 2 Enclosures

Legation of the United States
Peking October 5 1872

Sir:-

Referring to a memorandum of the 1st Diplomatic Bureau of the 25th July last which came enclosed in Department despatch No 92, I have now the honor to enclose copy of a note from the Chinese Plenipotentiaries to Mr Reed of November 1th 1858, and the reply, under date of November 10th

Hon Hamilton Fish
Secretary of State

10th. In the Legation archives they form enclosures 1a and 2a in Mr Reed's despatch to the Department No 36, of November 9. 1858.

There is apparently an error in the dates, for Mr Reed refers to Kweiliang's note as of the 5th November when its date is the 1st; and the reply bears the date of the 10th November while the covering despatch to the Department is dated the 9th.

These errors are evidently clerical, and are of no special importance.

This note of Mr Reed's

Reed contains an inexact statement which has given rise to much discussion between the Legation and the Yamen. The paragraph to which reference is made reads as follows:- "As to "Consuls being engaged in "trade the American Minister "desires to say that it is now "the law of his country that "no one shall be a Consul "who is engaged in trade".

The Government has been informed by all my predecessors since 1860, and also by myself, that Mr Reed was in error in making

the

the statement referred to, for there did not exist in 1858, nor has there ever been, any law on our Statute books prohibiting the appointment of merchant Consuls.

In reply to this the Chinese ministers say that, even if such be the case the United States Government ought to make good the promises and assurances of its Ministers entrusted with such great powers as were conferred on Mr Reed in 1858, and particularly so when, as in the present

present instance where there is no principle involved;— it being a simple question of the expenditure of a few thousand dollars more or less.

It is impossible to conceal from ourselves that there is much force and justice in the argument.

I have the honor to be

Sir,

Your obedient servant

Frederick F. Low

Enclosures

No 1 Kinneiang to Mr Reed

November 1 1858

No 2 Mr Reed to Kinneiang

November 10 1858

Enclosure No 1
Despatch No 193

November 1st 1858

Kweiliang, Hwashana, Ho Kwei Ming
Mingshen and Twan, Imperial
Commissioners &c, &c, herewith
send a communication.

In the treaties concluded
at Tientsin, it is provided that
subjects of the treaty-making powers
when going into the interior of China
must be provided with passports
issued by and having the seals
of their Consuls. Each Consul
is to ascertain that the persons
asking for these passports are
honorable and upright men before
issuing them. As it is of the
highest importance that there
should be no mistake on this
point, we cannot refrain from
addressing your excellencies (of
the three Treaty powers) upon the
subject, and desiring you to come
to a decision upon it, that no evils
may ensue in its mode of
operation. When you have done

so

so, we hope to learn the result.

It is plain to us that the subjects of non treaty powers should not be placed on the same footing as the subjects of those nations having treaties, but we ourselves being unacquainted with the usages of foreign nations in this respect, and unwilling of ourselves to lay down preventive regulations respecting issuing passports, desire first to receive the result of your deliberations before we act in the premises.

When persons belonging to either of the treaty powers disobey the laws, they are to be handed over to their respective Consuls for trial and punishment; but the Consuls of other nations are all merchants, and engaged in trade, having no control or restraint over their countrymen. Even these Consuls themselves smuggle and commit other illegal acts. Such things are continually

occuring

occuring, and if these Consuls do not and cannot restrain their countrymen the results will be that the whole body of merchants will become more reckless, and evils multiply enormously among them.

We have anxiously deliberated on this subject, and come to the conclusion that all those nations ought to appoint Consuls, whose special business shall be, to attend to the oversight of their countrymen, merchants ought no longer to act as Consuls for now they have only the name of such, and not the authority.

It is very important that Consuls be appointed by the treaty powers to reside at all the ports, newly opened to trade, there to exercise authority, and carry into effect the regulations. Many important duties devolve on the Consuls, and we wish to speak of those officers candidly and frankly, for some of those of your respective nations have formerly

acted

and often acted in a manner calculated to impede and mar the harmony that existed between their nations and our own. They have acted perversely without informing their own superiors, and wilfully disregarding every thing but their own opinions have carried out their high handed measures to the ruin of all cordial feeling.

We therefore earnestly request your excellencies to enjoin upon your Consuls at the open ports that when an altercation arises with the local authorities, and the two parties cannot agree, that both they and the native authorities are to refer the matter to their superiors for direction how to act. By following this rule, former evils will be avoided, and Consuls not be able to do as they please, but be constrained to adhere to the treaties, and this will strengthen and perpetuate the harmony those

compacts

compacts are designed to promote.

The local authorities certainly have no desire to treat Consuls disrespectfully, but the latter have frequently acted with rudeness and violence. This makes it desirable that plain rules for their official intercourse according to their respective ranks be laid down which will prevent all disputes.

The treaties now provide that a Consul is of equal rank with an intendant of circuit; and the treaty with France stipulates "that the high officers (of "that nation) shall correspond on "equal terms with the high "provincial dignitaries of China; "but when those of an inferior "rank have occasion to address "the high provincial officers, they "shall do so in the form of a "representation, and the latter shall "reply by a rescript and all "correspondence shall be conducted "on the basis of mutual equality "and reciprocal respect."

According

According to this article the design is that while a Consul corresponds on equal terms with an intendant of circuit, a Consul General should do so with the Treasurer or Judge of a province as being of equal rank with him. If a rule like this be adopted, it will prevent all dispute on such points, and lead to a general harmony and good understanding.

Again, we have ascertained that the various Consuls at Shanghai have issued their own national flags to native boats, to the number of thirty and more, and the number is increasing to the great inconvenience of public affairs. The masters of these boats are generally discontented men, unwilling quietly to attend to their own affairs, but who would not, if they had no such protection, dare, as they now do, to set the laws at defiance, screened by a foreign flag.

When the local authorities try to punish these offenders, they are unable to do so, for the miscreants act just as they

they please while they carry these flags. Outrage and lawlessness are consequently continually increasing, and there seems to be no limit to the evils flowing from this state of things. We fear, too, that it will be difficult to prevent the same practice at the other ports.

Conduct such as this will, we apprehend, ere long give rise to enormous wrongs and sufferings and lead to disputes between our countries; and it is of the very highest importance that laws adequate to restrain and repress it be enforced. We have accordingly decided to ask Your Excellencies to enjoin upon the Consuls of your nations, respectively, no longer to grant flags to native Chinese boats; and further, to request that those which have been granted to them be now withdrawn.

We will also ourselves issue our plain commands to the people,

at

at the same time, for their guidance, announcing to them that any native, who presumes to receive the flag of a foreign nation, and hoist it on his boat, will be regarded on proof of the act as a criminal, and be punished accordingly.

The preceding regulations, will we are of opinion, be for the best interests of the United States and of China, and, if adopted, conducive to our common welfare. We have therefore now communicated them to your excellency and request you to consider them, and favour us with your reply. We have also sent a similar despatch to each of the English and French ministers.

His Excellency
Wm B. Reed.
Envoy Extraordinary and
Minister Plenipotentiary of the
United States to China.

Enclosure No 2
Despatch No 193

Legation of the United States
Shanghai Novem. 11. 1858

The American Minister has had the honor to receive the communication addressed to him by their excellencies the imperial commissioners on the 5th instant, and has given it careful and most respectful consideration.

He highly esteems the friendly feeling which dictated it, and the eminently practical character of the inquiries and suggestions it makes. In the same spirit and with a view of continuing the relations which have heretofore existed, he now replies to it.

The right of citizens of the United States to go into the interior of China is derivative, and is conferred by that clause of the treaty of Tientsin of the 18th June which gives to the United States and its citizens all the privileges of

of the most favored nation. Being derivative, it must be exercised with all the limitations annexed to it, and one of those limitations is that no one can enter the interior of China without a passport. This obligation rests on the United States as much as on Great Britain and on France, and shall be complied with. So soon as the treaty of Tientsin is ratified by the President of the United States with the advice and consent of the Senate, measures will, no doubt be taken to prescribe a penalty to be inflicted by the consular authority on any one who enters China without a passport certifying to his citizenship, or having one refuses to produce it. This the American Minister will bring to the consideration of his government, and he does not doubt that it will at once make such provision as is needed to protect China, and prevent the infraction of its laws by Americans.

As

As to placing the new treaty powers of the west on the same footing as those nations which have treaties, the American minister, as the representative of a great and friendly treaty power, is alike sensible of the expediency of some change and the difficulty of effecting it.

He respectfully suggests, however, that the remedy is to a certain extent in the hands of the Chinese authorities. Let them in the first instance, show a willingness to make treaties with such powers small and great, as approach them for that purpose.

Years ago Spain asked to enter into treaty stipulations with China and was refused. This should not be now. At this moment Portugal has, it is understood, expressed the same wish. It should be met in a proper spirit and thus the new treaty powers be reduced.

But

But even if things remain as they are, there is a remedy which the American Minister respectfully suggests. By the received law of the west and western nations will recognize it everywhere, no one can presume to act as Consul, unless, as such, he is recognized and permitted to act by the government to which he is sent. If, therefore, any one is acting Consul in China without such express recognition by the local, or provincial, or imperial authorities, he is acting without law, and in his assumed Consular functions, is entitled to no protection. Let the Chinese authorities resolutely refuse to recognize these interloping officials. If they have done so, let them, as they have a perfect right to do, withdraw it. If an American acting as the Consul of a non treaty power uses this function for his benefit or protection as an American, let him be refused audience and be

referred

referred to his own Consul who will always be respectfully listened to. If an American acting as such Consul appeals to the local authorities for aid and redress for citizens of this non treaty power, let him in humanity be kindly listened to, and if redress be given, let him understand why it is done, out of humanity and not of right.

If these men calling themselves Consuls presume to enter or clear ships or transact business as such with the Customs, let it be refused until they put themselves under treaty obligation, and if then they still resist or evade the laws, let the revenue officers if need be, forcibly prevent it. This emergency will add force to the suggestion which, in a communication the American Minister made to their excellencies Kewcilian and Kwashana, on the 30th of June as to the importance of increasing the naval force of China, and the use of foreign ships and steamers.

As

As to consuls being engaged in trade, the American Minister desires to say that it is now the law of his country that no one shall be consul who is engaged in trade.

The American Minister deplores as sincerely as your excellencies can do, any past misconduct of the consuls who have represented the United States in China, if such has occurred. By direction of the President, he has endeavored to put matters right, and hopes there will be no ground of complaint hereafter. But if there should be, he begs to assure your excellencies, if it be brought to his knowledge, it shall be corrected. and if the proper authorities, on well ascertained facts, withdraw the exequator from a consul misconducting himself, the American minister and his government will not complain.

The best redress for all these irregularities is the dignified and resolute, but, above all, moderate assertion by the Chinese authorities of their own rights.

The question of the relative rank

of

of Consuls general does not arise with the United States, which has no such officer in China.

The Consul of the United States reports to the undersigned that he has granted no flags to Chinese boats, and, on examining the records, finds that none have been granted heretofore. The American Minister has impressed on the Consuls to abstain from any such practice.

In conclusion on this topic, he respectfully suggests to your excellencies that something be attempted or done; and it would be a proper subject, it seems to him, for a memorial to the throne, so that the imperial will being known there should be uniform compliance, by which a national flag, the same everywhere and easily identified, should be instituted, to be carried in some conspicuous place by every Chinese vessel, public or private. The United States compels its citizens to have such flag. So does every other nation in the west. Why, then,

then, should not China with her vast and unprotected commerce do the same? There would then be means of distinguishing the honest trader from the pirate and robber, and less inducement to usurp or adopt foreign and spurious flags.

The American Minister soon about to depart to his country, leaving the discharge of his duties to a fit person hereafter to be designated, begs again to assure your excellencies of his most distinguished consideration, and further to remind your excellencies that the clause of the treaty of Tientsin, by which, in time of danger and impending conflict the good offices of the United States were promised, is not an unmeaning one. The United States will always be ready peacefully to aid China. The United States expects in return, a faithful compliance to the very letter, of every engagement which China has made.

(Signed) W. B. Reed.

DEPARTMENT
RECEIVED
DEC
7
1872
OF STATE.

to Sec Navy. request return
Mr Bureau

No 194

~~Dispatch 19 Dec~~

Legation of the United States
Peking, October 7. 1872
Frederick F. Low
to
Department of State

Subject

Visit of Rear Admiral Jenkins to Peking.

Gives a brief account of the Admirals visit, and of his interview with Prince Kung and the Ministers of the Yamên.

No 194

Legation of the United States
Peking, October 7. 1872.

Sir:-

Rear Admiral Jenkins, accompanied by Capt Baldwin Lt Comdr Casey, Lieut Totten and Commerce and Dr Tryon, recently visited Peking and remained with me some days. They reached here on the 28th of September and left on their return on the 4th instant.

The day after the Admirals

Hon Hamilton Fish
Secretary of State

Admirals arrival I addressed a note to Prince Kung informing him of the fact and stating that the Admiral and his suite would be glad to call and pay their respects if he would fix upon a time.

A reply came fixing Monday the 30th ultimo, at 1½ P.M. at the Foreign Office. At the time named the Admiral and his suite accompanied me to the Yamen of Foreign affairs where we met the Prince and all the ministers of the Foreign Office except two, — one of whom was absent from

from the City, and the other too old and feeble to attend. The interview, as is usual on such occasions, was entirely formal. Political questions were not referred to.

In view of the early departure of the Admiral from the City, and the additional fact that the Prince's time is now wholly occupied in perfecting the arrangements for the Imperial marriage, it was intimated to the Prince that a return visit would not be expected. It is proper that this fact should

be

be stated as it is not impos-
sible the newspapers will
give to the public a wrong
impression, and lead to the
belief that the failure to return
the visit arose from a lack
of courtesy on the part of the
Officials instead of simply
complying with the Admirals
request made in advance.

An interesting
incident connected with our
visit was the presence at
the Yamên of two young
men (Chinese) who had been
called in from the College
to assist in interpreting.
This, so far as I am aware

is the first instance where native interpreters have been brought forward to assist in oral conversations at the Yamen; and it is only just to say that they performed their duty with great credit to themselves.

Wântsiang, through whose efforts mainly, the College was established, was present and seemed to watch with keen interest and pride the performances of the students.

In the course of the conversation reference was made to the youths who had recently gone to America

to

to be educated. When Wâuteang said that he felt a great interest in their welfare and was glad to know of their safe arrival in the United States.

Mistaking the latter part of his assertion for an enquiry, if I had heard of their safe arrival, I replied that it was not yet time for the news to reach here. In response he said, "Oh yes: they arrived "about twenty days ago. We "had a telegram saying they "were at San Francisco, "all well, and about starting "on the railroad for the Atlantic States."

States".

From this it would seem that the world moves, and that China is moving, very slowly perhaps, with it.

The Admirals visit to Peking afforded an opportunity for a full and frank comparison of views respecting the condition of affairs in the East, which will not, I trust, be without profit to all concerned. An understanding was come to in regard to the proper distribution of such portion of the Fleet as will be assigned to duty on the China Coast during

during the Winter, subject however to such changes as special and unforeseen circumstances may render necessary.

Some time since I had the honor to submit some suggestions in regard to the class of vessels of which the Asiatic Fleet should be composed, and also with reference to making Nagasaki the central and principal naval station. It affords me pleasure to say that the suggestions referred to are warmly approved of and endorsed by Admiral Jenkins

Jenkins,

I have the honor to be

Sir,

Your obedient Servant

Frederick F, Low